## City Service Area

## **Environmental and Utility Services**







**Mission:** Provide environmental leadership through policy development, program design, and reliable utility services

## **Primary Partners**

Environmental Services
Transportation

## **CSA OUTCOMES**

- ☐ Reliable Utility Infrastructure
- $\hfill \square$  Healthy Streams, Rivers, Marsh, and Bay
- ☐ "Clean and Sustainable" Air, Land, and Energy
- ☐ Safe, Reliable, and Sufficient Water Supply

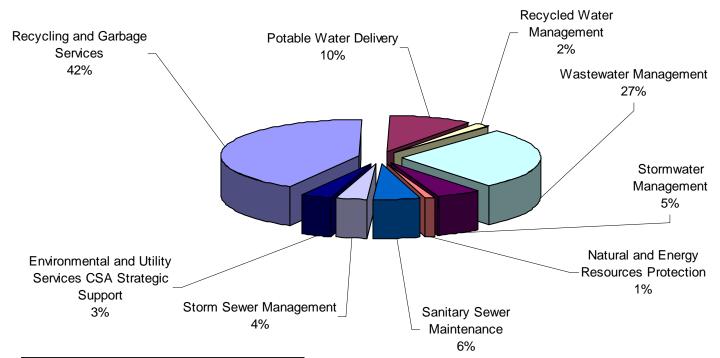
## **Environmental and Utility Services**

## **Expected Service Delivery**

3.75%.

	<b>Utility Infrastructure Management</b> – Build, operate, and maintain the City's wastewater, stormwater, recycled water, and potable water utility infrastructure to ensure system reliability and public health and safety.								
	<b>Pollution Prevention, Water Quality, and Habitat Protection</b> – Promote the health of the environment and South Bay Watershed through collection, treatment, and management of wastewater and stormwater runoff.								
	<b>Solid Waste Diversion</b> – Collect, process, and dispose of solid waste to maximize diversion from landfills and protect public health, safety, and the environment.								
	<b>Sustainable Facilities and Operations</b> – Reduce the City's environmental footprint through energy efficiency and conservation, water conservation, environmentally preferable purchases, and Green Building.								
	<b>Promote Sustainability in the Community</b> – Support the community in implementing sustainable infrastructure, equipment, and behaviors through education, public-private partnerships, the City's Green Building Policy, and implementation of the City's Green Vision.								
	Green Vision Implementation – Provide city-wide leadership to implement San José's Green Vision.								
Imp	acts of Budget Actions								
	<b>Sewer Service and Use Charge Rate Increase</b> – A 6% rate increase was approved for the Sewer Service and Use Charge for 2010-2011. This will raise the average payment by \$1.86 per month, from \$31.00 to \$32.86. The increase will allow for the continued rehabilitation and replacement of aging infrastructure at the Treatment Plant and in the sanitary sewer collection system, as well as replacement of operations and maintenance equipment.								
	<b>Treatment Plant Knowledge Transfer</b> – To address the need for knowledge transfer at the Treatment Plant as half of the facility's mechanical maintenance staff and over 40% of its operators become eligible to retire within the next five years, funding for temporary positions was approved to develop a comprehensive training program.								
	<b>Equipment Replacement</b> – To improve operational efficiency and reduce maintenance costs, the Department of Transportation will replace aging sewer cleaning equipment.								
	Stormwater Permit Compliance – To comply with new Municipal Regional Stormwater National Pollutant Discharge Elimination System (NPDES) Permit requirements, \$1.9 million in funding was approved for the installation and construction of structural trash controls in the storm sewer system, Integrated Pest Management demonstration projects, storm pump station monitoring equipment, Corporation Yard storage area protections and development and implementation of the City's strategy to meet the Stormwater Permit's aggressive trash reduction goals.								
	<b>Storm Sewer Infrastructure Rehabilitation</b> – The 2011-2015 Adopted Capital Improvement Program (CIP) includes funding to replace or rehabilitate the older pump stations in order to reduce the risk of localized flooding, for Alviso storm sewer system rehabilitation, to repair and restructure outfalls along local rivers and creeks, and to develop a system-wide master plan, as well as a North San José specific master plan.								
	Wholesale Water Cost Increases – Due to wholesale water cost increases, as well as reduced revenues resulting from the economic downturn and water conservation measures. Municipal Water System rates increased by								

## 2010-2011 Total Operations by Core Service

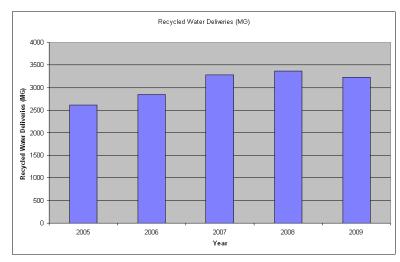


### City Service Area Budget Summary

		2008-2009 Actual 1		2009-2010 Adopted 2		2010-2011 Forecast 3	2010-2011 Adopted 4	% Change (2 to 4)
Dollars by Core Service								
Environmental Services	Φ.	4 070 400	Φ	0.700.700	Φ.	4 700 405	<b>A</b> 0.404.444	(04.00()
Natural and Energy Resources Protection	\$	1,379,130	\$	2,720,702	\$	1,786,465	\$ 2,124,144	(21.9%)
Potable Water Delivery		20,435,039		22,352,554		21,835,335	21,747,481	(2.7%)
Recycled Water Management		3,380,624		4,630,756		4,195,263	4,140,527	(10.6%)
Recycling and Garbage Services		89,642,907		93,799,402		93,537,334	92,866,323	(1.0%)
Stormwater Management		5,474,014		8,689,253		9,434,586	11,665,597	34.3%
Wastewater Management		60,005,265		67,430,603		59,679,475	60,574,211	(10.2%)
Strategic Support		6,813,135		6,841,501		6,993,630	6,744,764	(1.4%)
Transportation								
Sanitary Sewer Maintenance		12,448,118		13,204,056		11,518,292	12,630,587	(4.3%)
Storm Sewer Management		6,733,023		7,639,192		7,746,549	8,088,380	5.9%
Strategic Support		802,130		968,211		1,020,157	980,752	1.3%
Subtotal	\$	207,113,385	\$	228,276,230	\$	217,747,086	\$221,562,766	(2.9%)
Other Programs								
City-Wide Expenses	\$	2,357,843	\$	1,633,653	\$	593,000	\$ 11,588,274	609.3%
General Fund Capital, Transfers & Reserves		2,249,135		0		0	385,923	N/A
Subtotal	\$	4,606,978	\$	1,633,653	\$	593,000	\$ 11,974,197	633.0%
Total	\$	211,720,363	\$	229,909,883	\$	218,340,086	\$233,536,963	1.6%
Authorized Positions		643.93		654.38		653.83	647.51	(1.0%)

## Service Delivery Accomplishments

- At an average of 88 million gallons per day (mgd), discharge from the treatment plant during the summer of 2009 was well below the 120 mgd summer flow trigger, meeting all National Pollutant Discharge Elimination System (NPDES) Permit requirements.
- Ninety-eight percent of all sanitary sewer and 96% of storm sewer collection lines operated without obstruction, and 92% of all sanitary sewer line blockages were cleared within 4 hours.
- During 2008-2009, the stormwater drainage system completed the installation of approximately 6,500 linear feet of neighborhood storm mains, installed new inlets, manholes, curb and gutters, and upgraded existing pump stations.
- In 2009-2010, approximately 12,400 feet of sanitary sewers were replaced and 8,500 feet of sewers were rehabilitated.
- Under the new Sanitary Sewer Condition Assessment program, approximately 300,000 feet of sewers were video inspected. Pump stations (PS) and/or force mains (FM) including the Lamplighter FM, Spreckles FM and Montague PS were evaluated.
- The Sanitary Sewer Flow Monitoring Program (Master Planning) project will continue to serve the needs to complete the Sanitary Sewer Capacity Assessment Phase II Study for the City's East and West Service areas and update the Phase I Capacity Master Plan for the South, Central, and North areas. To support this effort, during 2009-2010, over 120 sites have been monitored for dry- and wet-weather flow data. Over 500 sanitary sewer manhole elevations have been surveyed to develop network models and scenarios based on the City's Geographic Information System, City's land-use, water consumption, flow data, and other factors.
- South Bay Water Recycling (SBWR) water deliveries for summer 2009 averaged 14.3 mgd (8.7 mgd on an annual basis). This reflects a slight decline in use of recycled water for irrigation, agriculture, and industrial purposes, primarily due to the mild summer.
- Solid waste recycling and landfill diversion rates remain among the highest achieved by any large city in the country. The City's waste diversion achievements received extensive recognition recently, when the City won the 2009 Governor's Environmental and Economic Leadership Award for waste reduction, the 2009 Solid



Waste Association of North America Recycling System Gold Excellence Award, and two 2009 California Resource Recovery Association awards: "Closing the Loop" for organics compost marketing and "Working Towards Zero Waste" for Special Events recycling.

City-wide municipal energy use dropped 8.9% between calendar year 2008 and 2009.

### Service Delivery Environment

#### CSA-wide

- Recycling rates and disposed waste characterization studies for the different sectors of the waste stream –
  Single-Family Dwelling, Multi-Family Dwelling, Commercial, Construction and Demolition indicate which
  areas need recycling education efforts, new programs, and stronger Zero Waste infrastructure for materials
  handling and processing.
- Aging storm sewer, sanitary sewer, and treatment plant infrastructure results in increased maintenance and rehabilitation/replacement costs. Master Plans for these systems are in development to identify necessary longterm improvements.
- The North San José Development Plan and the Evergreen East Hills Visioning Strategy are being implemented to meet the potable water, recycled water, sanitary sewer, storm sewer, and treatment plant infrastructure needs for these areas.

#### Wastewater

- Eighty-two percent of the sanitary sewer system, approximately 1,750 miles, was constructed between 1950 and 1979, making it between 31 and 60 years old. Thus, a significant portion of the system will reach the 100-year age milestone within the next 50 years. At this point it is unclear whether the aging sewers will require a significant increase in replacement expenditures in the near future, or whether they will continue to operate well beyond the 50 year design life.
- The average age of the City's 15 sanitary sewer pump stations is over 35 years. The standard for the design life of the mechanical and electrical components of a pump station is 10 to 25 years. It is reasonable to expect that a pump station be rehabilitated with new pumps, motors and control systems every 25 years. The City currently has 8 stations that are beyond this limit.
- As information such as video images of the sewers, flow monitoring data, construction records and
  maintenance histories of the collection system is compiled to support asset management, computerized
  modeling, database software, and hardware are needed to analyze and store the data and to allow for efficient
  implementation of information processing and sharing between planning, engineering, operating and
  maintenance departments.
- The City has developed, certified and implemented a comprehensive Sewer System Management Plan (SSMP) to meet the requirements of the Regional Water Quality Control Board (RWQCB). Staff is presently in the process of an internal audit of its sanitary sewer system and will implement necessary changes as needed.
- The City is also participating in discussions with Bay Area Clean Water Agencies (BACWA), the Regional Water Quality Control Board (RWQCB), and the Bay Area Stormwater Management Agencies Association (BASMAA) regarding issues and challenges related to diverting stormwater flows to the sanitary sewer system rather than allowing those flows to enter the creeks and rivers (known as "First Flush" or dry weather diversion).
- Regulatory development of Total Maximum Daily Loads (TMDLs) for several pollutants, such as mercury and polychlorinated biphenyls (PCBs), will impact the NPDES permits for the Treatment Plant and stormwater.

# City Service Area Environmental and Utility Services OVERVIEW

## Service Delivery Environment (Cont'd.)

#### Wastewater (Cont'd.)

- The City is participating in the State and federal planning process for restoration of the South Bay Salt Ponds (16,500 acres) and U.S. Army Corps of Engineers Shoreline Study to ensure that the City's and Treatment Plant's interests are considered. These interests include protecting Alviso and the Treatment Plant from any potential tidal impacts, ensuring that Moseley Tract and Pond A18 issues are considered and addressed, and providing endangered species habitat.
- The Treatment Plant will continue working on the implementation of the new Computerized Maintenance Management System as part of its long-term Asset Management Program. The new system will provide for more efficient organization of work and tracking of critical assets. The Plant is also continuing to work on the Enhanced Preventative Maintenance Program aimed at identifying and optimizing preventative maintenance at the Plant to improve the life expectancy of equipment and reduce the cost of emergency or corrective repairs.
- The Plant has initiated an aggressive energy management program and implemented several projects in 2009-2010 that have reduced energy usage. These projects received rebates from PG&E based on the energy saved which essentially offset the cost of the projects. Additional energy savings projects are in progress for implementation in 2010-2011 and 2011-2012.
- The Treatment Plant is implementing a robust Environmental Management System (EMS) and aims to have the program ISO 14000 certified. The EMS program will help the Plant maintain compliance with all regulatory requirements and environmental programs, as well as reduce the Plant's environmental footprint. EMS targets include energy reduction, emissions reductions, pollution prevention, and reliability improvements.
- The Treatment Plant is developing a Master Plan, which will include a long-term CIP as well as a land use plan.
   The Master Planning process includes significant public engagement, including the formation of a community advisory group.

#### Water Supply

- Green Vision Goal #6, recycle or beneficially reuse 100% of wastewater (100 mgd), could require significant increases in recycled water utilization over the next 12 years.
- Continuing population growth, uncertainty about the Sierra snow pack, the Delta delivery system, and global warming's effects on water supply continue to make conservation and water recycling an important priority.
- Proposition 84 provides \$5.4 billion to State and local agencies for improving programs aimed at preserving natural resources and funding water programs. The funding includes State projects and grants for flood control, safe drinking water, improving water quality, integrated water management, water planning, and sustainable communities.
- The City is partnering with the Santa Clara Valley Water District (District) for operation of the South Bay Water Recycling (SBWR) System. The City and District are working on several fronts on issues pertaining to recycled water including: advanced treatment of recycled water, expansion of uses, irrigation of redwood trees and other sensitive plants, and securing federal and State grants.

# City Service Area Environmental and Utility Services OVERVIEW

## Service Delivery Environment (Cont'd.)

#### Urban Runoff / Stormwater

- On October 14, 2009, the Regional Water Quality Control Board adopted a new NPDES stormwater permit (Stormwater Permit) to regulate 77 municipalities in the Bay Area. The new Stormwater Permit includes more specific requirements for existing programs and requires new or expanded efforts, such as those to address the stormwater impacts of land development, to dramatically and quantifiably reduce the amount of trash entering local creeks from the storm sewer system, and to implement pilot projects to treat stormwater suspected to contain elevated levels of key pollutants polychlorinated biphenyls (PCBs) and mercury.
- City departments involved in the implementation of the Stormwater Permit are collaborating on a five-year implementation strategy for the new permit. The City is collaborating with other co-permittees, the Regional Board, and stakeholders on implementation plans. The City is also working with the regional groups that have secured grant funding to help support elements of the Stormwater Permit. To date, these funds will address a portion of the costs for the Trash Reduction, PCBs, and Mercury provisions of the permit.
- The City is collaborating with other agencies and stakeholders through the Santa Clara Basin Watershed Management Initiative to promote an integrated, escalated effort to reduce community litter (and trash in creeks) including clean-ups, interception prior to discharge, and pollution prevention.
- In 2009, the State Water Resources Control Board issued a new statewide NPDES permit to cover stormwater
  management for construction activities. This permit marks a significant shift in regulatory approach in that it
  requires monitoring from all construction sites and uses numeric limits to determine the need for follow up
  actions and regulatory violations. These new requirements were effective July 1, 2010 and will impact the City's
  capital projects.
- Increased regulatory interest in using "green infrastructure" approaches to address stormwater issues and an aging storm sewer infrastructure unsuitable for accommodating planned growth are driving the need for a multi-year master planning effort for the storm sewer system.

#### Solid Waste

- For single-family households, staff implemented organic waste collection and recycling pilots in 2009-2010 with approximately 16,500 households participating. These pilots include the Yard Trimmings Cart Pilot, the Garbage Processing Pilot, and the Organics Cart Pilot. The Garbage Processing Pilot processes garbage to recover recyclable material from waste collected from single-family residences. For the Organics Cart Pilot, residents are asked to deposit bagged food scraps into a yard trimmings cart for composting. Organic waste is the single largest component of residential garbage.
- Council approved the redesign of the commercial garbage and recycling collection program to a multi-district exclusive system. Full implementation will occur in 2012. Redesigning the commercial system will be required to achieve the City's 2013 goal of 75% waste diversion. It is estimated that the redesigned commercial system will increase the commercial solid waste diversion rate from 15% to over 75%, generate green collar jobs, provide feedstock for potential waste to energy operations, and decrease the greenhouse gas impact of the current system by providing more efficient routing and an updated vehicle fleet.

# City Service Area Environmental and Utility Services OVERVIEW

## Service Delivery Environment (Cont'd.)

#### Solid Waste (Cont'd.)

- City solid waste management planning efforts focus on addressing AB32 Climate Change goals by removing organics from the waste stream. Organics represent approximately 30% of the disposed waste by weight in San José. To this end, staff has already begun residential food waste and yard trimming collection pilots and issued a request for proposals for organic waste processing as part of the redesign for the commercial garbage and recycling program. Lastly, staff is pursuing grants, and other sources of funds, that target organics as a feedstock for biomethane generation, and is aligning these opportunities with the Water Pollution Control Plant operations and master planning process.
- Staff finalized design concepts for the renovation of a warehouse into the Environmental Innovation Center (EIC) on Las Plumas Avenue. The EIC is envisioned to be a state of the art facility that advances the City's commitment to San José's Green Vision through Clean Technology innovation and job creation. It would achieve these goals by providing a premier environmental showcase and development center for cutting-edge technologies that support the City's Green Vision. This facility would house four distinct environmental programs: Clean Technology Development Center, a construction waste reuse retail outlet, public space for environmental programs and training, and a household hazardous waste drop off operation. This combination of activities would promote environmental innovation, create jobs and provide a local resource for residents and businesses.

#### Sustainability

- In support of Green Vision Goal #2, reduce per capita energy use by 50%, staff is working to identify seed funding to implement energy efficiency measures in City facilities and develop and implement energy efficiency programs city-wide through replacement of lights and equipment with energy efficient options.
- In order to reduce green house gas emissions and advance the City's Green Vision, the City is collaborating with local hauling companies to convert diesel trucks to run on alternative fuels.
- Staff tracks existing and emerging solar and other renewable energy technologies for implementation in the City, and facilitates the installation of solar infrastructure on City facilities and properties city-wide. These activities support Green Vision Goal #3, receive 100% of our electrical power from clean renewable resources.
- The Silicon Valley Energy Watch Partnership with PG&E, a three-year grant program, enables staff to provide extensive energy efficiency education and outreach to the community.
- Given the current economic climate, staff is focusing on opportunities for increasing State and federal monetary support and subsidies for development and deployment of renewable energy technologies to meet City long-term energy and climate goals.
- Over the next 15 years, solid waste landfill space in the region will likely reach capacity. Sites for landfills are increasingly difficult to find in California and with higher fuel prices and concerns about green house gas emissions, local recycling processing infrastructure will need to be enhanced to handle various waste streams.

## CSA Priorities/Key Services

- Provide city-wide leadership and support for the implementation of San José's Green Vision.
- Continue to identify and implement energy efficiency opportunities in City facilities.
- Continue to partner with other agencies and pursue grants to promote clean and renewable energy in the community, including waste-to-energy and biomass-to-energy facilities.
- Operate and maintain the City's utilities storm sewer, sanitary sewer, treatment plant, potable water, and recycled water reliably and efficiently.
- Rehabilitate and replace the aging storm sewer and wastewater collection and treatment system infrastructure, focusing on completing the Plant Master Plan, Sanitary Sewer Master Plan, and initiating the Storm Sewer Master Plan.
- Continue to invest in capacity and condition assessments for the sanitary sewer collection system to support economic development and build out of the General Plan and to minimize overflows and back-ups.
- Continue to meet National Pollutant Discharge Elimination System (NPDES) wastewater permit compliance.
- Implement NPDES stormwater permit requirements, adopted in October 2009.
- Continue to promote water conservation and to invest in and expand the recycled water system.
- Continue to implement solid waste reduction programs in order to achieve 75% landfill diversion by 2013 and zero waste by 2022.
- Develop the Environmental Innovation Center at Las Plumas.

#### Budget Dollars at Work: Performance Goals

#### Outcome 1: Reliable Utility Infrastructure

The utility infrastructure in San José, which includes the sanitary sewer system, storm sewer system, Treatment Plant, and water distribution system, is aging and requires increased maintenance. In order to maintain system reliability and minimize maintenance costs, the older infrastructure needs to be rehabilitated or replaced. The Environmental Services Department has retained a consultant to develop a Plant Master Plan to address long-term needs and improvements. For the collection system, the five-year CIP programs \$39.3 million to rehabilitate the existing sanitary sewers and \$87.7 million to upgrade the existing pipe network to support the build-out of the General Plan.

Strategic Goals		2008-2009 Actual	2009-2010 Target	2009-2010 Estimate	2010-2011 Target	5-Year Goal
Preserve the City's utility infrastructure to optimize	% of utility assets in working condition:     SJ/SC Water Pollution Control Plant	95%	95%	96%	95%	95%
service delivery capabilities	- Sanitary Sewer lines	99%	98%	98%	98%	99%
	- Storm Sewer lines	99%	95%	95%	95%	97%
	- SJ Municipal Water	98%	95%	99%	95%	95%
	- South Bay Water Recycling	96%	95%	94%	95%	95%
	2. % of customers rating service as good,					
	based on reliability, ease of system use and					
	lack of disruption:					
	- Potable	90%	90%	90%	90%	90%
	- Recycled	81%	85%	85%	85%	90%
	<ol> <li>Ratio of Municipal Water System average residential water bill to average residential water bill of other San José water retailers*</li> </ol>	75%	<100%	81%	<100%	<100%
Provide for collection, disposal & processing of solid waste	% of waste diverted from landfills     (State Goal: 50%)					
Solid Waste	- Overall	60%	62%	66%	69%	75%
	- Residential	NEW	NEW	NEW	NEW	NEW
	- Commercial	NEW	NEW	NEW	NEW	NEW
	- City Facilities	NEW	NEW	NEW	NEW	NEW

Changes to Performance Measures from 2009-2010 Adopted Budget: Yes1

#### ✓ Storm Sewer Infrastructure

In order to address critical infrastructure needs in the storm sewer system and meet the percentage of utility assets in working condition, the following augmentations were approved for 2010-2011:

- Continued funding of a comprehensive storm pump station rehabilitation capital program (\$908,000 for 2010-2011) to replace or rehabilitate the oldest and least reliable pump stations, reducing the risk of localized flooding during storm events.
- Addition of \$667,000 for Alviso Storm System rehabilitation to address drainage issues in the area.
- Funding to repair and restructure outfalls along local rivers and creeks.
- Funding to develop a system-wide master plan as well as a North San José specific master plan.

<sup>\*</sup> San José water retailers include: San José Water Company and Great Oaks Water Company.

<sup>&</sup>lt;sup>1</sup>Changes to Performance Measures from 2009-2010 Adopted Budget:

**x** "% of residents rating collection services as good or excellent" was deleted because it is reported in the Recycling and Garbage Services Core Service.

O "% of solid waste diverted from landfill" was revised in order to demonstrate solid waste diverted from landfills by the following categories: Overall, Residential, Commercial, and City Facilities.

#### Outcome 1: Reliable Utility Infrastructure (Cont'd.)

#### ✓ Sanitary Sewer Infrastructure

The Sanitary Sewer Master Plan Studies Phase I identified capacity deficiencies in the sewer system for the north, south, and central areas based on the City's 2020 General Plan criteria. The ongoing Phase II studies will prioritize sewer capacity improvement projects for the east and west areas and update the Phase I results, incorporating the approved preferred land-use alternatives for General Plan 2040.

In order to address critical infrastructure needs in the sanitary sewer system and meet the performance measure "Annual capital renewal investment as a % of value of the plant," the following augmentations were approved for 2010-2011:

- Funding of \$200,000 to conduct an odor control pilot project to address areas of the City prone to sewage odor and \$250,000 for a grease control pilot project to reduce the amount of grease in the sewer system.
- Funding of \$500,000 to rehabilitate the Montague pump station.
- Funding of \$1,450,000 to replace aging sewer cleaning equipment (combination cleaning trucks, utility and maintenance trucks, and backhoe and trailer) in the Department of Transportation to improve the effectiveness and efficiency of sewer line cleaning, blockage removal, and overflows.

#### ✓ San José/Santa Clara Water Pollution Control Plant Infrastructure

In 2007-2008, staff began development of a 30-year master plan to identify and plan for future needs of the treatment plant. Funding for the master plan is spread over a three-year period, ending in 2010-2011. Once completed, staff will identify financing alternatives and implementation of the Plan's recommendations.

In order to improve operational efficiencies, maintain infrastructure at the Treatment Plant, meet its performance goal for the measure "Annual capital renewal investment as a % of value of the plant," the following budget augmentations were approved for 2010-2011:

- One-time funding to support community engagement, outreach, and other activities in the development of the Plant Master Plan.
- Realignment of staffing at the Treatment Plant to provide support for design and piloting of CIP projects, with the deletion of two vacant electrician positions and the addition of an Environmental Services Project Manager and a Plant Mechanical Supervisor. In addition to this, the projects included in the 2011-2015 Adopted CIP include funding for contractual and temporary support, mainly for design and piloting of projects. The need for temporary staffing will be reevaluated annually as design and engineering work ramps up for the Master Plan projects.
- In addition to the items approved in the operating budget, \$278.2 million in construction projects over five years is included in the 2011-2015 Adopted CIP to maintain and update the Treatment Plant's infrastructure.

## ✓ Water Supply Infrastructure

Despite a 3.75% rate increase for Municipal Water System customers, the System's rates will still remain well below those of other San José retailers. Muni Water continues to meet its performance goal for the performance measure "Annual capital renewal investment as a % of value of the plant."

#### Outcome 1: Reliable Utility Infrastructure (Cont'd.)

#### ✓ Solid Waste Management Infrastructure

To continue to increase solid waste diversion and meet Zero Waste by 2022, new infrastructure and programs will be necessary in the coming decade. Over the next 15 years, solid waste landfill space in the region will likely reach capacity. Sites for landfills are becoming increasingly difficult to find in California and with higher fuel prices and concerns about green house gas emissions, local recycling processing infrastructure will need to be enhanced to handle various waste streams.

- The Zero Waste Master Plan will guide the CSA five-year infrastructure goals and objectives, including facility upgrades to increase the processing capacity needed to achieve Zero Waste.
- The Recycle Plus contract extensions approved by City Council in June 2010 allowed the opportunity for the Residential Program to be redesigned for Zero Waste.

#### Outcome 2: Healthy Streams, Rivers, Marsh and Bay

Strategic Goals		CSA Performance Measures	2008-2009 Actual	2009-2010 Target	2009-2010 Estimate	2010-2011 Target	5-Year Goal
Manage stormwater for suitable discharge into creeks, rivers and the Bay	1.	% of residents surveyed who understand that any substances that get washed down the street end up in the Bay without treatment through the storm drain system	44%	50%	N/A*	50%	60%
Manage wastewater for suitable discharge into the Bay	1.	Mgd discharged to Bay during the average dry weather effluent flows (ADWEF) season	91 mgd	105 mgd	95 mgd	105 mgd	<120 mgd
	2.	% of time pollutant discharge requirements for wastewater NPDES permit are met or surpassed	100%	100%	100%	100%	100%
Develop, operate, and maintain a recycled water system that reduces effluent to the Bay	1.	Millions of gallons per day diverted from flow to the Bay through recycled water during the ADWEF period	14.7 mgd	15 mgd	14.3 mgd	16 mgd	20 mgd

Changes to Performance Measures from 2009-2010 Adopted Budget: Yes1

## ✓ Wastewater Program Implementation

Since 1990, the City has invested considerable effort in protecting local streams, rivers, and the San Francisco Bay salt marsh habitat. The Treatment Plant's average dry-weather effluent flow for 2009 was 91 mgd, well below the 120 mgd trigger set by the State to protect wildlife habitat. The Plant continues to consistently meet permit discharge requirements.

Salt marsh habitat protection is a key element of San José's watershed protection efforts. City staff actively participates in the South Bay Salt Pond Restoration Project, which aims to restore former salt ponds to salt marshes or managed pond habitat, as well as the South San Francisco Bay Shoreline Study, which studies flood protection requirements for the area.

<sup>\*</sup> Reported biennial; the next report will be in 2011-2012.

<sup>&</sup>lt;sup>1</sup>Changes to Performance Measures from 2009-2010 Adopted Budget:

**X** "% of Urban Runoff Management Plan (URMP) tasks completed by target date" was deleted because performance progress could not measure the level of work required to comply with the City's Stormwater Permit. The Work Plan measure does not reflect level of effort or relative risk of non-compliance with the regulatory requirements.

#### Outcome 2: Healthy Streams, Rivers, Marsh and Bay (Cont'd.)

#### ✓ Wastewater Program Implementation (Cont'd.)

The City continues to expand programs and partnerships to address priority pollutants and emerging threats to water quality. Residential thermometer exchange and dental amalgam programs aim to reduce mercury discharge, and the City's efforts to provide safe and convenient disposal for unused medications are critical to addressing the emerging concern of the effects of these medications on water quality.

To support the Wastewater Program and continue to meet or surpass the pollution discharge requirements, the following augmentations were approved for 2010-2011:

- Funding for a temporary position at the Plant to provide technical assistance in developing a comprehensive strategy to assure compliance with increasingly complex air quality regulations.
- Temporary funding of \$650,000 to support the Plant's succession planning and training challenges, including the implementation of a Mechanic-in-Training Program.
- Additional funding for the County's Household Hazardous Waste Program to increase the number of annual appointments available to San José residents by 3,000 (25%) and decrease the average wait time for an appointment from six weeks to four weeks.

#### ✓ Stormwater Program Implementation

The NPDES stormwater permit adopted in October 2009 directs significant enhancements to municipal maintenance activities, water quality monitoring, enforcement programs, and application of treatment and flow control measures on development projects. The first year of implementation will emphasize redirecting operations, developing new and expanded programs, procurement of equipment, and the refinement of program data tracking.

In support of the permit, the City conducts activities to limit non-storm water discharges to the storm sewer system and to implement "Best Management Practices" (BMPs) to reduce pollutants such as mercury, pesticides, and trash. This includes implementing BMPs for municipal activities, enforcing State and local regulations, working with new development to minimize pollutants, and educating property owners on how to protect water quality.

The City undertakes a variety of initiatives to reduce trash entering the storm sewer system and to address the impacts of trash and debris from creekside encampments. The City is partnering with the Santa Clara Valley Water District to leverage resources, and is preparing to collaborate with other cities to implement a large scale effort to markedly reduce the presence of trash in creeks.

To comply with the new permit requirements, the following augmentations were approved for 2010-2011:

- Funding of \$1.6 million to purchase and install structural trash controls in the storm sewer system to capture and prevent trash from entering the system and local creeks, and funding a temporary position to oversee the development and implementation of the City's strategy to meet the Stormwater Permit's aggressive trash reduction goals.
- The addition of \$100,000 for Integrated Pest Management Pilot and Demonstration Projects to reduce the level of pesticides and herbicides from entering local creeks and \$50,000 to purchase and/or replace sampling equipment needed for storm pump station monitoring.
- Funding for the construction of paved berms for the City's Corporation Yards to prevent materials and potential pollutants from the storage yards from being washed into the storm sewer system.

#### Outcome 3: "Clean and Sustainable" Air, Land and Energy

Strategic Goals	CSA Performance Measures	2008-2009 Actual	2009-2010 Target	2009-2010 Estimate	2010-2011 Target	5-Year Goal
Procure, manage and conserve clean, economical and reliable	% change in energy usage in all     City accounts from 2007 baseline	NEW	NEW	NEW	-10%	-23%
sources of energy	kW of renewable energy installed at City-owned sites	NEW	NEW	NEW	10,348	24,146
Reduce, reuse, and recycle solid waste at home, work, and play	<ol> <li>% of residents rating the City's job of providing information on how to recycle as good or excellent</li> </ol>	88%	90%	90%	90%	90%

Changes to Performance Measures from 2009-2010 Adopted Budget: Yes1

- The Green Vision, a 15-year effort to accomplish sweeping economic and environmental advances, and its 10 goals were adopted by City Council in October 2007. These ambitious goals acknowledge that a vital economy is not at odds with a sustainable, healthy environment. Each of the 10 goals offers an opportunity to reexamine current service delivery models, expenditures, investments, and priorities, and to integrate Green Vision elements into existing City processes, programs, and policies. Success would require strategic use of limited resources, robust interdepartmental cooperation, and partnerships with external organizations.
- A vital component of achieving Green Vision Goal #4, build or retrofit 50 million square feet of Green Buildings, is the implementation of the City's Green Building Policy. In 2007, the City revised the Green Building Policy to ensure achievement of the U.S. Green Building Council LEED Silver standard for all new city facilities larger than 10,000 square feet. The City Council also recommended reviewing how the City's existing buildings could use the LEED for Existing Building green building guidelines, and asked for a program that would provide technical assistance and incentives for private sector adoption of green building techniques. In 2008, the Council adopted a Private Sector Green Building Policy, which requires large developments to meet LEED Silver standards. The accompanying ordinance was adopted by Council in August 2009.
- The City's Green Vision Goal #2 is to reduce the community's electrical energy use by 50% by 2022. To accomplish this, the City is exploring expanded partnerships including the Local Government Partnership Program with PG&E, funded by the California Public Utilities Commission. This program, the Silicon Valley Energy Watch Program (SVEW), provides technical assistance, educational events and workshops, and marketing and outreach, to coordinate energy efficiency services within Santa Clara County.
- As diversion levels draw closer to Zero Waste, an evaluation of emerging technologies will be required to identify additional diversion opportunities within our waste streams. The technologies may also provide energy generation and reductions in green house gas emissions.
- ✓ The City of San José achieved a diversion rate of 66% for 2008-2009 through administration of its residential, commercial, and civic garbage and recycling programs. San José has one of the highest diversion rates among large cities nationwide. San José's extensive incentive-based programs make it easier to "Recycle Where You Live, Work, Learn and Play." Customer outreach to neighborhoods, schools, and businesses, and a high level of customer satisfaction also contribute to the overall success of these well-designed programs.
- ✓ The following budget augmentation was approved for 2010-2011:
  - Extending the Energy Officer position for another year will identify and implement energy efficiency projects in City facilities. The position cost will be covered through the energy cost savings it generates.

<sup>&</sup>lt;sup>1</sup>Changes to Performance Measures from 2009-2010 Adopted Budget:

**U** "% of energy conserved in City facilities" was revised to "% change in energy usage in all City accounts from 2007 baseline" to better measure appropriate progress towards Green Vision goal #2 and to include energy usage from all City accounts and to establish a baseline year for comparison.

<sup>&</sup>quot;# of renewable systems in City facilities" was revised to "kW of renewable energy installed at City-owned sites" to better measure appropriate progress towards Green Vision goal #3 and track renewable energy installed as opposed to the number of installations.

#### Outcome 4: Safe, Reliable and Sufficient Water Supply

Strategic Goals	CSA Performance Measures	2008-2009 Actual	2009-2010 Target	2009-2010 Estimate	2010-2011 Target	5-Year Goal
Decrease reliance on imported water	Mgd of water conserved and recycled	17.3	18.3	17.8	18.5	22.7
Public is educated regarding water conservation, and the	% of residents demonstrating     water conservation knowledge	56%*	62%	N/A*	68%	91%
safe and appropriate use of recycled water and water	% of residents with water saving fixtures in their home	N/A*	44%	N/A*	48%	70%
resources*	3. % of residents who are in favor of using recycled water	N/A*	75%	75%	75%	90%
Meet or exceed drinking and recycled water quality standards	% of San José Municipal Water System drinking water samples meeting or surpassing State and federal water quality	99%	100%	99.5%	100%	100%
	% of time recycled water meets or surpasses State recycled water standards (Title 22)	100%	100%	99.9%	100%	100%

Changes to Performance Measures from 2009-2010 Adopted Budget: No

- ✓ The South Bay Water Recycling Program (SBWR) delivers recycled water from the Treatment Plant to customers for reuse in irrigation, landscaping, and other beneficial purposes. Planned upgrades to Treatment Plant facilities through the 2011-2015 Adopted CIP will ensure continued treatment of recycled water to meet customer needs and comply with regulatory requirements.
- ✓ The SBWR Program has increased the number of customers using recycled water to over 600. The City and Santa Clara Valley Water District have undertaken a collaborative effort to prepare a long-term plan for the operation, maintenance and future expansion of the SBWR system.
- The City plays an important role in ensuring future water supplies through its water conservation and water recycling programs. Both of these programs serve a dual purpose: (1) conserving potable water supplies, and (2) reducing the amount of wastewater to the San José/Santa Clara Water Pollution Control Plant. Both programs have been a major factor in keeping flows below the 120 mgd permit trigger.
- The Water Conservation Program promotes water use efficiency and supports the indoor water conservation efforts of the Santa Clara Valley Water District through cost sharing agreements that implement water conservation programs. Water conservation reduces flows to the Treatment Plant and provides water supply benefits, which are needed to support increased population growth as well as the effects of climate change and potential drought on water supply. The CSA also implemented a drought response program for the Municipal Water System customers from June 1, 2009 to May 31, 2010. The city-wide water conservation plan will be in its third year of implementation in 2010-2011.

<sup>\*</sup> Data comes from the 2008 Water Focus Survey. The next Survey is scheduled for summer 2010 with results available by January 2011.

## Environmental and Utility Services ADOPTED BUDGET CHANGES

Adopted Core Service Changes	Positions	All Funds (\$)	General Fund (\$)
ENVIRONMENTAL SERVICES DEPARTMENT			
Natural and Energy Resources Protection			
Environmental Services Department Employee Total		(5,622)	(5,622)
Compensation Reduction		(0,0==)	(0,022)
Energy Efficiency Program	1.00	0	0
<ul> <li>Silicon Valley Energy Watch Grant</li> </ul>		272,521	272,521
<ul> <li>Rebudget: Solar America Cities Partnership Grant</li> </ul>		47,780	47,780
<ul> <li>Rebudget: Silicon Valley Energy Watch Grant</li> </ul>		23,000	23,000
Potable Water Delivery			
<ul> <li>Water Utility Staffing</li> </ul>	(0.60)	(81,854)	0
<ul> <li>Vehicle Maintenance Staffing and Contractual Services</li> </ul>		(6,000)	0
Recycled Water Management			
<ul> <li>Water Utility Staffing</li> </ul>	(0.40)	(53,924)	0
<ul> <li>Vehicle Maintenance Staffing and Contractual Services</li> </ul>		(812)	0
Recycling and Garbage Services			
<ul> <li>Environmental Innovation Center Land Purchase:</li> </ul>		(1,500,000)	0
Non-Personal/Equipment Funding Savings			
<ul> <li>City Facilities Solid Waste Collection Contract Funding Reallocation</li> </ul>		828,989	0
Stormwater Management			
Structural Trash Controls		1,000,000	0
<ul> <li>Hydromodification Management Plan Map Revisions</li> </ul>		190,000	0
<ul> <li>Trash Reduction Program Oversight</li> </ul>		117,511	0
<ul> <li>Household Hazardous Waste Program</li> </ul>		100,000	0
<ul> <li>Integrated Pest Management Projects</li> </ul>		100,000	0
<ul> <li>Stormwater Pump Station Monitoring Equipment</li> </ul>		50,000	0
<ul> <li>Corporation Yard Storage Area Protections</li> </ul>		36,000	0
<ul> <li>Rebudget: Creek Trash Prevention Program</li> </ul>		600,000	0
<ul> <li>Rebudget: Environmental Enforcement Data Systems Upgrade</li> </ul>		37,500	0
Wastewater Management			
<ul> <li>Environmental Services Custodial Services - Service Delivery Model Changes</li> </ul>	(4.00)	(128,010)	0
<ul> <li>Vehicle Maintenance Staffing and Contractual Services</li> </ul>		(34,188)	0
<ul> <li>Water Pollution Control Plant Training Program</li> </ul>		649,832	0
<ul> <li>Plant Air Regulations Compliance</li> </ul>		137,051	0
<ul> <li>Plant Master Plan Support</li> </ul>		115,129	0
Household Hazardous Waste Program		100,000	0
<ul> <li>Plant Capital Staffing</li> </ul>		13,422	0

## City Service Area Environmental and Utility Services ADOPTED BUDGET CHANGES

Adopted Core Service Changes		Positions	All Funds (\$)	General Fund (\$)
ENIMIDONIMENITAL CEDMICEC DEDARTME	NIT (CONTIN			
ENVIRONMENTAL SERVICES DEPARTME Wastewater Management (Cont'd.)	INI (CONTI	<b>).</b> )		
Corporation Yard Storage Area Protections			4,000	0
<ul> <li>Rebudget: Environmental Enforcement Data Upgrade</li> </ul>	a Systems		37,500	0
Strategic Support				
Environmental Services Department Manage Professional Employees Total Compensation			(178,375)	0
Environmental Services Department Administration     Staffing		(1.00)	(70,491)	0
Claiming	Subtotal	(5.00)	2,400,959	337,679
TRANSPORTATION DEPARTMENT				
Sanitary Sewer Maintenance				
<ul> <li>Vehicle Maintenance Staffing and Contractu</li> </ul>	al Services		(45,705)	0
<ul> <li>City Facilities Solid Waste Collection Contra Reallocation</li> </ul>	ct Funding		(32,000)	0
<ul> <li>Sewer Maintenance Vactor Trucks</li> </ul>			850,000	0
<ul> <li>Utility and Maintenance Trucks</li> </ul>			225,000	0
<ul> <li>Sewer Lines Repair Equipment</li> </ul>			75,000	0
<ul> <li>Mabury Yard VolP Upgrade</li> </ul>			40,000	0
Storm Sewer Management				
Pavement Resurfacing and Sealing		(0.95)	(75,331)	0
Vehicle Maintenance Staffing and Contractu	al Services		(34,202)	0
<ul> <li>Infrastructure Maintenance Staffing</li> </ul>		(0.20)	(23,636)	0
<ul> <li>City Facilities Solid Waste Collection Contra Reallocation</li> </ul>	ct Funding		(5,000)	0
Inlet Debris Removal Funding Reallocation			0	(100,000)
Utility and Maintenance Trucks			225,000	0
Our City Forest Grant Match			120,000	0
<ul> <li>Sewer Lines Repair Equipment</li> </ul>			75,000	0
<ul> <li>Mabury Yard VolP Upgrade</li> </ul>			40,000	0
<ul> <li>Rebudget: Non-Personal/Equipment - Gold Pump Station Improvements</li> </ul>	Street Storm		20,000	0
Strategic Support				
<ul> <li>Transportation Department Management an Employees Total Compensation Reduction</li> </ul>	d Professional		(25,677)	0
<ul> <li>Traffic Safety Education Program Staffing</li> </ul>		(0.17)	(13,728)	0
	Subtotal	(1.32)	1,414,721	(100,000)
Subtotal C	ore Services	(6.32)	3,815,680	237,679

## Environmental and Utility Services ADOPTED BUDGET CHANGES

	<b>.</b>	A 11 = 1 (A)	General
Adopted Core Service Changes	Positions	All Funds (\$)	Fund (\$)
OTHER CHANGES			
City-Wide Expenses			
<ul> <li>City Building Energy Projects Program</li> </ul>		1,500,000	1,500,000
Energy Efficiency Program		119,115	119,115
IDC Garbage Disposal Fees		(299,100)	(299,100)
Storm Fees		11,760	11,760
Miscellaneous Rebudgets		9,663,499	9,663,499
General Fund Capital, Transfers, and Reserves			
<ul> <li>Transfers to Other Funds: Retiree Healthcare</li> </ul>		385,923	385,923
Subtotal Other Changes	0.00	11,381,197	11,381,197
Total Adopted Budget Changes	(6.32)	15,196,877	11,618,876

## 2010-2011

## **OPERATING BUDGET**

Environmental
AND
UTILITY SERVICES
CSA

**CORE SERVICES** 

## Service Delivery Framework

CITY SERVICE AREA
A cross-departmental collection of core
services that form one of the City's six
key "lines of business"

MISSION STATEMENT Why the CSA exists

## Environmental and Utility Services CSA

Mission:

Provide environmental leadership through policy development, program design and reliable utility services.



#### CSA OUTCOMES

The high level results of service delivery sought by the CSA partners

#### Outcomes:

- Reliable Utility Infrastructures
- Healthy Streams, Rivers, Marsh and Bay
- "Clean and Sustainable" Air, Land and Energy
- Safe, Reliable and Sufficient Water Supply



## PRIMARY PARTNERS Departments with Core Services that contribute to achievement of CSA Outcomes

CORE SERVICES
Primary deliverables of the organization

## Environmental Services Department

Core Services:

Natural and Energy Resource Protection

Potable Water Delivery

Recycled Water Management

Recycling and Garbage Services

Stormwater Management

Wastewater Management

## Transportation Department

Core Services:

Sanitary Sewer Maintenance

Storm Sewer Management

OPERATIONAL SERVICES
Elements of Core Services; the "front-line"
of service delivery

STRATEGIC SUPPORT
Organization-wide guidance and support
to enable direct service delivery











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Core Service: Natural and Energy Resources Protection

## **Core Service Purpose**

romote enhanced air quality, environmentally responsible land use, and conservation of water and energy resources.

ĸey	Operational Services:	
	Manage Green Building Program Implement Sustainable Energy	NPDES Permits Development and Implementation
	Practices	Habitat Protection
	Promote Improved Air Quality	Urban Environmental Accords
	Implement Development Review	<b>Environmentally Preferable</b>
	and Land Use Policies	Procurement Policy
	<b>Protect and Monitor Groundwater</b>	Grant Development
	Quality	Support Green Vision
	Water Conservation	Implementation

#### **Performance and Resource Overview**

his core service focuses on the City's efforts to conserve and protect the quality of air, land, water, energy, and other natural resources. The Environmental Services Department coordinates and collaborates with other departments to implement key initiatives through program and policy development, outreach and education, legislative advocacy, and by identifying and securing supporting grants. The work of this core service is guided by the City's Green Vision. In conjunction with the City's ten Green Vision goals, the City of San José has committed to additional environmental initiatives, including the Urban Environmental Accords, the Bay Area Climate Change Compact, the U.S. Mayors' Climate Protection Agreement, the Greenhouse Gas Emissions Reduction Plan, and statewide legislation such as the Global Warming Solutions Act of 2006 (AB32). Through these initiatives, directly supported by the Natural and Energy Resources Protection Core Service, the City demonstrates national leadership in environmental sustainability, growth of the green economy, and an improved quality of life for its residents. This core service was previously titled "Protect Natural and Energy Resources."

Energy Efficiency and Renewable Energy – The focus in 2009 was on building the foundations to achieve the City's aggressive long term energy efficiency goals, with particular emphasis on finding resources to launch the programs effectively. The energy efficiency measures installed to date in city facilities have, on average, a four year payback period. In 2009, the City Council approved expanding the City's Energy Fund by returning the first two years of energy savings to the fund, allowing additional improvements on City facilities. The City received a formula allocation of \$8.8 million from the American Recovery and Reinvestment Act of 2009 (ARRA), which will allow for additional energy efficiency improvements, such as lighting retrofits, ventilation and air

Core Service: Natural and Energy Resources Protection

## **Performance and Resource Overview (Cont'd.)**

conditioning equipment replacements, LED streetlight installations, and activities to ensure solar projects on city facilities. Once all the ARRA funded energy efficiency projects are implemented, the annual energy savings will be approximately \$422,000. A three year contract, beginning January 1, 2010, with PG&E for the City-administered Silicon Valley Energy Watch Program will provide continued outreach and direct services to Santa Clara County small businesses, nonprofits, and low/moderate income households. The Department of Energy also awarded the City \$1.1 million for the City's Solar America City Program to focus on market transformation through financing options for solar installations, job training, and education and outreach throughout the community.

Sustainable (Green) Building – On September 8, 2009, the City Council adopted Green Building Regulations for Private Development (San José Municipal Code Chapter 17.84) mandating United States Green Building Council Leadership in Energy and Environmental Design (LEED) or Build it Green GreenPoint Rated certification for certain types and sizes of developments. As part of the Policy implementation, staff is identifying opportunities for LEED certification for all existing buildings and buildings currently being designed or under construction that are owned or managed by the City or the San Jose Redevelopment Agency. During 2009-2010, three municipal buildings earned LEED certification: Starbird Youth Center (Silver), Roosevelt Community Center (Gold) and Mayfair Community Center (Certified), bringing the total to eight municipal buildings that have been certified. Four additional buildings are in the process of pursuing LEED Existing Building certification for their operation and maintenance.

Environmentally Preferable Procurement Policy – During 2008-2009, the City purchased over \$24 million of environmentally preferable paper, vehicles, fuel, computers, and other products (up from \$19 million in 2007-2008). Particularly noteworthy innovations included piloting energy-saving LED streetlights, use of "green" concrete that emits fewer greenhouse gasses, goats and sheep for grazing at a number of parks and facilities, a hybrid maintenance truck that uses less diesel fuel, and a plug-in hybrid vehicle for parking enforcement services. The City is also transitioning to the use of more environmentally sound janitorial products. These efforts improve the environment and health for City workers and visitors, and provide leadership in environmental procurement to our residents.

Water Conservation – 2009-2010 was the City's second year of implementing the city-wide Water Conservation Plan. This plan includes the continuance of a cost-sharing agreement with the Santa Clara Valley Water District for indoor water conservation programs such as incentives for water-efficient toilets and clothes washers. The cost-sharing agreement also funds water conservation technologies, and water use surveys for residents and businesses. The City is maintaining its contribution to these cost-shared programs over the next year. In 2008-2009, water conservation efforts achieved approximately 303,000 gallons per day of water savings, or 151% of the water conservation goal, in the Water Pollution Control Plant service area. The City is expected to achieve 75% of this goal for 2009-2010 because there was a delay in negotiating and signing the agreement, shortening the span of time when funding was available for water conservation programs. In 2008-2009, the City adopted an updated water waste ordinance to prevent and reduce practices that waste water. Upcoming efforts include an update of the City's Water-Efficient Landscape Standards ordinance and increased efforts to educate youth on water conservation.

Core Service: Natural and Energy Resources Protection

## Performance and Resource Overview (Cont'd.)

Natu	ral and Energy Resources Protection Performance Summary	2008-2009 Actual	2009-2010 Target	2009-2010 Estimated	2010-2011 Target
6	(Energy) % change in energy usage in all City Accounts from 2007 baseline	NEW	NEW	NEW	-10.0%
<b>©</b>	(Energy) % of energy used at the Water Pollution Control Plant that is renewable	NEW	NEW	NEW	60%
<b>©</b>	(Water) % of annual goal for gallons of water conserved tributary area-wide	151%	100%	75%	100%
Š	(Water) Net cost per gallon per day of water conserved through City programs	\$1.39	\$1.79	\$1.58	\$1.66
R	(Water) % of residents demonstrating water conservation knowledge	56%*	62%	N/A*	68%

Changes to Performance Measures from 2009-2010 Adopted Budget: Yes1

Activity & Workload Highlights	2008-2009 Actual	2009-2010 Forecast	2009-2010 Estimated	2010-2011 Forecast
Millions of gallons per day conserved (tributary area-wide)	0.303	0.200	0.15	0.28
Cumulative millions of gallons per day conserved since July 1992 (tributary area-wide)	8.57	8.50	8.72	9.00
Number of United Nations Urban Environmental Accords Implemented (of 21 total Actions)	12	16	13	13

Changes to Activity & Workload Highlights from 2009-2010 Adopted Budget: No

<sup>\*</sup> Data for this measure is from the 2008 Water Focus Survey, which was conducted in summer 2008. The next scheduled survey is scheduled for summer 2010 with results available by January 2011.

<sup>&</sup>lt;sup>1</sup> Changes to Performance Measures from 2009-2010 Adopted Budget:

U "% of energy conserved in City facilities" was revised to "% change in energy usage in all City accounts from 2007 baseline" to better measure appropriate progress towards Green Vision Goal #2 and to include energy usage from all City accounts and to establish a baseline year for comparison.

<sup>+ &</sup>quot;% of energy used at the Water Pollution Control Plant that is renewable" was added to demonstrate how much of the Plant's energy usage, which accounts for more than 50% of all City facilities, comes from renewable resources.

**x** "% of Notice of Violations (NOVs) resolved to the satisfaction of the regional body" was deleted because performance progress could not be demonstrated. If any NOVs are issued, it is mandated that violations are resolved, so the percentage reported will always be 100%.

Core Service: Natural and Energy Resources Protection

## Performance and Resource Overview (Cont'd.)

Natural and Energy Resources Protection Resource Summary	2	2008-2009 Actual 1	2009-2010 Adopted 2	_	2010 <i>-</i> 2011 Forecast 3	_	2010-2011 Adopted 4	% Change (2 to 4)
Core Service Budget *								
Personal Services Non-Personal/Equipment	\$	560,826 818,304	\$ 711,629 2,009,073	\$	637,740 1,148,725	\$	808,419 1,315,725	13.6% (34.5%)
Total	\$	1,379,130	\$ 2,720,702	\$	1,786,465	\$	2,124,144	(21.9%)
Authorized Positions		4.19	5.19		4.58		5.58	7.5%

<sup>\*</sup> The Resource Summary includes all operating allocations within the Department that contribute to the performance of this Core Service. Note that additional resources from City-Wide, Special Funds and/or Capital Funds may also contribute to Core Service performance, yet are displayed elsewhere in this budget.

## **Budget Changes By Core Service\*\***

Ac	lopted Core Service Changes	Positions	All Funds (\$)	General Fund (\$)
1.	Environmental Services Department Employee Total Compensation Reduction		(5,622)	(5,622)
2.	Energy Efficiency Program	1.00	0	0
3.	Silicon Valley Energy Watch Grant		272,521	272,521
4.	Rebudget: Solar America Cities Partnership		47,780	47,780
5.	Rebudget: Silicon Valley Energy Watch		23,000	23,000
20′	10-2011 Adopted Core Service Changes Total	1.00	337,679	337,679

<sup>\*\*</sup> Detailed information regarding these budget changes can be found in the City Departments section of this document.

Core Service: Potable Water Delivery

## **Core Service Purpose**

	evelop, operate, and maintain the City's r	munic	cipal potable water system.
Key	Operational Services:		
	System Operations System Maintenance Regulatory Compliance		Customer Service System Expansion System Improvements

#### **Performance and Resource Overview**

he Municipal Water System (Muni Water) continues to deliver high quality service at low cost for San José residents compared to the private water retailers in San José. Wholesale water costs have increased significantly over the last few years and are scheduled to increase again in 2010-2011. Due to the current economic downturn and water conservation measures put in place by the City Council in response to Santa Clara Valley Water District actions, a reduction in revenues to the Water Utility Funds has occurred. This revenue reduction poses a continuing challenge, given the increased needs for infrastructure replacement and the need for system improvements, due to the age of the system. This core service was formerly called "Manage Potable Water."

To offset an increase in the cost of wholesale water from the San Francisco Public Utilities Commission, as well as revenue loss due to the current economic downturn and reduced consumption, Muni Water rates increased by 3.75%. A 3.75% rate increase translates to a monthly increase averaging \$1.57 for a typical residential household. Even with this increase, Muni Water customers will continue to have retail water rates below the average in San José and the Bay Area.

Performance results in the Potable Water Delivery Core Service continue to be high. The "% of water samples meeting or surpassing State and federal water quality standards" is estimated to be 99.5%, slightly below the target of 100% in 2009-2010. The cost measure comparing the ratio of the average Muni Water residential bill with other San José water retailers (currently 81%) reflects Muni Water's lower rates. Data for the remaining measures is collected biennially and will be available after summer 2010, when the next survey is scheduled. The "millions of gallons of water delivered per year to the Municipal Water System customers" is projected to end the year at 7,994 million gallons, which is slightly below the forecast level primarily due to the economic downturn and water conservation efforts.

Core Service: Potable Water Delivery

## Performance and Resource Overview (Cont'd.)

	Potable Water Delivery Performance Summary	2008-2009 Actual	2009-2010 Target	2009-2010 Estimated	2010-2011 Target
<b>©</b>	% of water samples meeting or surpassing State and federal water quality standards	99.5%	100.0%	99.5%	100.0%
8	Ratio of Municipal Water System (MWS) average residential water bill to average residential water bill of other San José water retailers*	75.3%	<100%	81%	<100%
•	% of customer service requests handled within 24 hours	N/A**	N/A**	N/A**	80%**
R	% of MWS customers rating service as good or excellent, based on reliability, water quality, and responsiveness***	90%***	90%	NA***	90%

Changes to Performance Measures from 2009-2010 Adopted Budget: No

Activity & Workload Highlights	2008-2009 Actual	2009-2010 Forecast	2009-2010 Estimated	2010-2011 Forecast
Millions of gallons of water delivered per year to MWS customers	7,846	8,335	7,994	8,054
Total number of MWS customers	26,426	26,500	26,475	26,510

Changes to Activity & Workload Highlights from 2009-2010 Adopted Budget: No

<sup>\*</sup> San José water retailers include: San José Water Company and Great Oaks Water Company.

<sup>\*\*</sup> Data is not available. The Integrated Billing System does not currently enable this type of data tracking. In the future, data for this measure will come from the biennial Muni Water Customer Satisfaction Survey. The next survey is scheduled for fall 2010.

<sup>\*\*\*</sup> Data for this measure came from the biennial Muni Water Customer Satisfaction Survey taken in summer 2008. The next survey is scheduled for fall 2010.

Core Service: Potable Water Delivery

## Performance and Resource Overview (Cont'd.)

Potable Water Delivery Resource Summary	2008-2009 Actual 1	2009-2010 Adopted 2	2010-2011 Forecast 3	2010-2011 Adopted 4	% Change (2 to 4)
Core Service Budget *					
Personal Services Non-Personal/Equipment	\$ 3,601,218 16,833,821	\$ 3,550,122 18,802,432	\$ 3,622,695 18,212,640	\$ 3,540,841 18,206,640	(0.3%) (3.2%)
Total	\$ 20,435,039	\$ 22,352,554	\$ 21,835,335	\$ 21,747,481	(2.7%)
Authorized Positions	33.27	33.27	31.90	31.30	(5.9%)

<sup>\*</sup> The Resource Summary includes all operating allocations within the Department that contribute to the performance of this Core Service. Note that additional resources from City-Wide, Special Funds and/or Capital Funds may also contribute to Core Service performance, yet are displayed elsewhere in this budget.

## **Budget Changes By Core Service\*\***

Adopted Core Service Changes	Positions	All Funds (\$)	General Fund (\$)
Water Utility Staffing	(0.60)	(81,854)	0
Vehicle Maintenance Staffing and Contractual Services		(6,000)	0
2010-2011 Adopted Core Service Changes Total	(0.60)	(87,854)	0

<sup>\*\*</sup> Detailed information regarding these budget changes can be found in the City Departments section of this document.

Core Service: Recycled Water Management

## **Core Service Purpose**

evelop, operate, and maintain a recycled water system that reduces effluent to the Bay and provides a reliable and high quality alternative water supply.

Key	Operational Services:	
	System Operations and Maintenance Regulatory Compliance	Customer Connection Services Education and Marketing System Expansion and Development

#### **Performance and Resource Overview**

he City's investment in South Bay Water Recycling (SBWR) supports the City's economic development goals by keeping the San José/Santa Clara Water Pollution Control Plant's discharges to South San Francisco Bay below the Regional Water Quality Control Board's discharge flow trigger of 120 million gallons per day (mgd). By providing infrastructure for and promoting recycled water use by businesses and institutions in San José and its tributary partners, the City helps protect endangered species habitat in the South Bay and provides an alternate supply of high-quality water for a variety of uses, thereby preserving our limited drinking water supplies. SBWR strives to achieve the City's Green Vision Goal #6: Recycle or beneficially reuse 100% of wastewater (100 mgd). Prior to 2010-2011, this core service was titled "Manage Recycled Water."

Performance objectives for recycled water focus on both program effectiveness (mgd, % effluent used) and program cost. In 2008-2009, SBWR delivered an average of 9 mgd to over 600 recycled water customers, at a cost of \$1,480 per million gallons delivered, reducing summer discharges to the Bay by over 14 mgd. SBWR program activities focus on two main areas: 1) increasing the total amount of recycled water used and 2) increasing revenues and reducing program costs. The primary plan for accomplishing these goals is focused on connecting the nearly forty facilities adjacent to the existing SBWR pipeline, increasing potential demand by an additional 2 mgd, and increasing revenues. A supporting strategy involves the possibility of passing a City of San José ordinance to require new developments near the pipeline to be constructed with dual plumbing systems suitable to allow recycled water to be used indoors for flushing toilets as well as for cooling tower use. The concept of the ordinance was proposed to the Transportation and Environment Committee in September 2008 and has been presented to the development community and other stakeholders at a number of workshops and presentations in the area. Stakeholders have provided feedback on the proposed ordinance, and a revised ordinance is being prepared for a fall 2010 presentation to the City Council.

Core Service: Recycled Water Management

## **Performance and Resource Overview (Cont'd.)**

In addition, SBWR plans to add nine miles of recycled water pipeline in 2010-2011 to reach new industrial and irrigation customers. This \$15 million construction program is supported by a \$6.46 million grant from the US Bureau of Reclamation through appropriations from the American Recovery and Reinvestment Act of 2009 (ARRA). The program includes four pipeline extensions in Santa Clara and four in San José, including a retrofit of a pipeline for the main campus of San José State University.

In a related strategy, the City and the Santa Clara Valley Water District recently executed the 40-year Recycled Water Facilities and Programs Integration Agreement to develop the use of recycled water, including joint development of an advanced water treatment facility that will reduce the salinity of recycled water. As approved by the City Council on March 2, 2010, the City expects to contribute up to \$11 million to the construction of the \$50 million facility that will reduce the salinity of recycled water by 30% or more, making the water easier to use for both irrigation and industrial applications. The City-District agreement also includes provisions for sharing operational costs and collaborating on future public education and outreach activities.

The performance measure "millions of gallons per day (mgd) diverted from flow to the bay for beneficial purposes during the dry weather period" is anticipated to fall below the targeted level in 2009-2010. The original target amount of 15 mgd was based on the anticipated addition of several large industrial users of recycled water that are now scheduled to occur in 2010-2011. This lower flow also impacted the targets for "% of wastewater influent recycled for beneficial purposes during dry weather period" and "millions of gallons of recycled water delivered annually." In all cases, significant improvement from the 2009-2010 estimate is expected during 2010-2011. improvement is also expected to lead to an increase in revenues and a corresponding reduction in the "cost per million gallons of recycled water delivered." Revenues are also expected to increase in 2010-2011 due to an increase in the wholesale cost of recycled water for irrigation. This last of three scheduled \$20 per acre-foot (AF) rate increases for irrigation customers has increased the cost to \$415 per AF. In June 2010, the City Council also authorized a \$20 per AF increase in the cost of recycled water for industrial recycled water users. Higher rates and additional demand should add another \$200,000 to \$300,000 per year to SBWR revenues, bringing the program closer to costrecovery. Finally, in 2009-2010, the City updated its Groundwater Management and Monitoring Plan and formed an ongoing Operations Committee to ensure continued compliance with all Regional Board requirements. This will ensure that the program can achieve 100% compliance with standards ("% of time recycled water quality standards are met or surpassed"). The performance measure for customer satisfaction ("% of recycled water customers rating service as good or excellent") will be measured during a survey scheduled for 2010-2011 and updated in future reports.

Core Service: Recycled Water Management

## Performance and Resource Overview (Cont'd.)

	Recycled Water Management Performance Summary	2008-2009 Actual	2009-2010 Target	2009-2010 Estimated	2010-2011 Target
<u>©</u>	Millions of gallons per day diverted from flow to the Bay for beneficial purposes during the dry weather period*	14.7	15	14.3	16
<b>©</b>	Millions of gallons of recycled water delivered annually	3,160	3,450	3,300	3,500
6	% of time recycled water quality standards are met or surpassed	100%	100%	99.9%	100%
<u>©</u>	% of wastewater influent recycled for beneficial purposes during the dry weather period*	14%	15%	14%	15%
[3]	Cost per million gallons of recycled water delivered	\$1,480	\$1,075	\$1,622	\$1,529
R	% of recycled water customers rating service as good or excellent, based on reliability, water quality, and responsiveness	81%**	85%**	NA**	85%**

Changes to Performance Measures from 2009-2010 Adopted Budget: No

Activity & Workload	2008-2009	2009-2010	2009-2010	2010-2011
Highlights	Actual	Forecast	Estimated	Forecast
Total number of South Bay Water Recycling customers	584	630	601	625

Changes to Activity & Workload Highlights from 2009-2010 Adopted Budget: No

Dry weather period is defined as the lowest three months continuous average between May and October, which during the fiscal year reporting period is July-September.
 Data for this measure comes from the "Overall Satisfaction" parameter as reported in the 2007-2008 Recycled Water Customer

<sup>\*\*</sup> Data for this measure comes from the "Overall Satisfaction" parameter as reported in the 2007-2008 Recycled Water Customer Satisfaction Survey in September 2008. The next scheduled survey will cover 2009-2010 and will be conducted in fall 2010.

Core Service: Recycled Water Management

## Performance and Resource Overview (Cont'd.)

Recycled Water Management Resource Summary	2	2008-2009 Actual 1	_	2009-2010 Adopted 2	_	010-2011 Forecast 3	_	2010-2011 Adopted 4	% Change (2 to 4)
Core Service Budget *									
Personal Services Non-Personal/Equipment	\$	1,883,441 1,497,183	\$	2,178,721 2,452,035	\$	2,389,127 1,806,136	\$	2,335,203 1,805,324	7.2% (26.4%)
Total	\$	3,380,624	\$	4,630,756	\$	4,195,263	\$	4,140,527	(10.6%)
Authorized Positions		17.59		17.59		18.03		17.63	0.2%

<sup>\*</sup> The Resource Summary includes all operating allocations within the Department that contribute to the performance of this Core Service. Note that additional resources from City-Wide, Special Funds and/or Capital Funds may also contribute to Core Service performance, yet are displayed elsewhere in this budget.

## **Budget Changes By Core Service\*\***

Adopted Core Service Changes	Positions	All Funds (\$)	General Fund (\$)
Water Utility Staffing	(0.40)	(53,924)	0
2. Vehicle Maintenance Staffing and Contractual Serv	(812)	0	
2010-2011 Adopted Core Service Changes Total	(0.40)	(54,736)	0

<sup>\*\*</sup> Detailed information regarding these budget changes can be found in the City Departments section of this document.

Core Service: Recycling and Garbage Services

## **Core Service Purpose**

	ollect, process, and recycle, prevent, and dispose of solid waste to maximize diversion from landfills and protect public health, safety and improve the environment.								
Key	Operational Services:								
	Develop and Administer Programs to Maximize Diversion Provide Customer Service		Manage Collection, Processing, and Disposal Contracts						

#### **Performance and Resource Overview**

achieved a diversion rate of 66% for the 2008 CalRecycle Annual Report through administration of its residential, commercial, and civic garbage and recycling programs. This diversion rate remains among the highest diversion rates of any large city in the nation. Due to the City's comprehensive diversion and outreach programs, the overall landfill diversion rate increased from 11% in 1990 to 66% in 2008, compared to the State's mandate of 50%. San José's extensive incentive-based programs make it easier to "Recycle Where You Live, Work, Learn, and Play." Customer outreach to neighborhoods, schools, and businesses, and well-designed programs lead to a high level of customer satisfaction and contribute to the overall program success. This core service was previously titled "Manage Recycling and Garbage Services."

Approved on September 26, 2008, State Senate Bill (SB) 1016 builds upon Assembly Bill (AB) 939 by implementing a simpler and timelier indicator of jurisdiction diversion that focuses on reported disposal at permitted landfills. AB 939 sets a 50% diversion mandate, which is monitored through each jurisdiction's per capita disposal target. The target is set based on the average disposed per person over the 2003-2006 period. For this time period, a disposal rate of 5.2 pounds of waste to the landfills per capita per day represents a 50% diversion rate for San José. The City's preliminary per capita disposal rate for 2008-2009 of 3.6 pounds per capita per day indicates significantly more diversion, and has been submitted to the California Integrated Waste Management Board (CIWMB) for approval. In order to maintain the diversion rate above the State's 50% mandate and meet Cityapproved goals (Green Vision Goal #5: Achieve 75% solid waste diversion from landfills by 2013 and Zero Waste by 2022), additional opportunities for diversion will continue to be explored. Staff will focus streams: single-family four principal waste and multi-family residences; commercial/industrial/institutional waste generators (including large public events and City facilities and operations); and construction and demolition activity. Performance results will hinge on the success of a variety of elements, including the development of infrastructure such as compost or waste-to-energy facilities, land use that would allow for the construction of such facilities, program design, and outreach to waste generators, all of which are included as part of the

Core Service: Recycling and Garbage Services

## Performance and Resource Overview (Cont'd.)

Zero Waste Strategic Plan for 2009, adopted by the City Council on December 16, 2008. The commercial sector (including construction and demolition) generates approximately 75% of all San José waste, and therefore represents the greatest potential for diversion. The Commercial Franchise System is being restructured to maximize recycling opportunities and effectiveness for the business community, as well as to stabilize revenue to the General Fund, which currently fluctuates due to diversion and economic cycles. The City's Construction and Demolition Diversion Deposit (CDDD) program continues to encourage diversion of construction and demolition debris, the single largest component of the City's waste stream by weight. This program is also being evaluated for improvement opportunities.

The Integrated Waste Management (IWM) Fund supports residential, commercial, and civic solid waste activities, including various contracts for collection, processing, and disposal. The residential division manages contracts for Recycle Plus garbage, recycling, yard trimmings, and street sweeping services for single and multi-family dwellings. Improvements made to multi-family collection and sorting over the past year have resulted in the highest-performing multi-family recycling program in the United States. These improvements have resulted in over 80% of multi-family waste being diverted from local area landfills. These program enhancements have also created more than 70 new jobs in San José.

Two key actions included in the 2010-2011 Adopted Budget realign services currently funded in the General Fund to the Integrated Waste Management Fund, resulting in ongoing expenditure reductions for the General Fund. There will be an alignment of contract expenditures and contract administration for the garbage and recycling services for City facilities. Several departments budget these expenditures in the General Fund; however, management of the contract resides with the IWM Division, providing an opportunity to streamline contract administration and create administrative efficiencies. Also included in this budget is the reallocation of expenses from the General Fund to the Integrated Waste Management Fund and the Storm Sewer Fund for the Environmental Services Department's IDC Disposal Agreement, which provides City-wide disposal of solid waste for all municipal operations. Late Fee revenue in the Integrated Waste Management Fund will be used to fund most of this shift with a small portion that covers the disposal costs associated with sewer maintenance coming from the Storm Sewer Operating Fund. This is expected to result in a net savings of \$1.1 million to the General Fund each year.

Core Service: Recycling and Garbage Services

### Performance and Resource Overview (Cont'd.)

	Recycling and Garbage Services Performance Summary	2008-2009 Actual	2009-2010 Target	2009-2010 Estimated	2010-2011 Target
R	Number of household hazardous waste disposal appointments available for San José - Residents - Small Businesses	NEW NEW	NEW NEW	NEW NEW	10,500 230
R	% of customers rating recycling and garbage services as good or excellent, based on reliable ease of system use, and lack of disruption - Single-Family Dwelling - Multi-Family Dwelling - Commercial Facilities	lity, N/A N/A N/A	89% 76% N/A	N/A* N/A* N/A	89% 76% NEW**

Changes to Performance Measures from 2009-2010 Adopted Budget: Yes1

Of The Performance Measure "% of residential pickups completed as scheduled" was made an Activity & Workload Highlight, and revised to "number of residential pickups not completed as scheduled." The former measure was meaningless given that the vast number of collection opportunities will always produce a 100% outcome.

5 "% of customers rating recycling and garbage services as good or excellent, based on reliability, ease of system use, and lack of disruption" measure was revised to add tracking of commercial facilities survey results as the franchise system is moved from non-exclusive to exclusive, making the data available.

+ "Number of household hazardous waste disposal appointments available for San José" measure was added to track increases in San José residents' utilization of the new San José Environmental Innovation Center, opening summer 2010.

**x** "% of solid waste diverted from landfill" measure was deleted because it already appears in the Environmental & Utility Services CSA Overview.

**X** "City's annual per household cost to provide recycling and garbage collection, processing, and disposal (per residential household)" measure was deleted because the varying levels and types of garbage collection, processing, and disposal services provided across jurisdictions makes it difficult to use this measure as a benchmark.

**x** "% of service requests resolved on time per contract requirements" was deleted because the performance measure does not accurately assess the performance. Due to the large number of service opportunities, the percentage will always be 100%.

Activity & Workload Highlights	2008-2009 Actual	2009-2010 Forecast	2009-2010 Estimated	2010-2011 Forecast
Total tons of residential solid waste diverted from landfills	287,195	290,000	290,000	291,450
Total tons of residential solid waste landfilled	187,058	200,000	200,000	201,000
Total number of residential households served	301,490	306,000	306,000	307,500
Number of residential pickups not completed as scheduled *	214	197	197	197

Changes to Activity & Workload Highlights from 2009-2010 Adopted Budget: Yes 1

<sup>\*</sup> Biennial measure. Results from the survey conducted in 2009-2010 will be published in the 2011-2012 Proposed Operating Budget.

<sup>\*\*</sup> First survey to be conducted in summer 2011.

<sup>&</sup>lt;sup>1</sup> Changes to Performance Measures from 2009-2010 Adopted Budget:

<sup>\*</sup> Average per week

<sup>&</sup>lt;sup>1</sup>Changes to Activity & Workload Highlights from 2009-2010 Adopted Budget:

Core Service: Recycling and Garbage Services

## Performance and Resource Overview (Cont'd.)

Recycling and Garbage Services Resource Summary	2008-2009 Actual 1	2009-2010 Adopted 2	2010-2011 Forecast 3	2010-2011 Adopted 4	% Change (2 to 4)
Core Service Budget *					
Personal Services Non-Personal/Equipment	\$ 5,038,494 84,604,413	\$ 5,343,218 88,456,184	\$ 5,891,722 87,645,612	\$ 5,891,722 86,974,601	10.3% (1.7%)
Total	\$ 89,642,907	\$ 93,799,402	\$ 93,537,334	\$ 92,866,323	(1.0%)
Authorized Positions	41.91	42.91	43.56	43.56	1.5%

<sup>\*</sup> The Resource Summary includes all operating allocations within the Department that contribute to the performance of this Core Service. Note that additional resources from City-Wide, Special Funds and/or Capital Funds may also contribute to Core Service performance, yet are displayed elsewhere in this budget.

## **Budget Changes By Core Service\*\***

Ad	lopted Core Service Changes	Positions	All Funds (\$)	General Fund (\$)
1.	Environmental Innovation Center Land Purchase: Non-Personal/Equipment Funding Savings		(1,500,000)	0
2.	City Facilities Solid Waste Collection Contract Funding Reallocation		828,989	0
20	10-2011 Adopted Core Service Changes Total	0.00	(671,011)	0

<sup>\*\*</sup> Detailed information regarding these budget changes can be found in the City Departments section of this document.

Core Service: Stormwater Management

#### **Core Service Purpose**

romote the health of the South Bay watershed through regulatory programs that prevent pollution from entering the storm sewer system and waterways.

Key	Operational Services:		
	Illegal Discharge Response Program (ICID)		Inter-Departmental Technical Support
	Industrial Inspection Program (IND)		Inter-Agency Collaboration  Education and Outreach
	Water Quality Monitoring Program	- Calcard	

#### **Performance and Resource Overview**

uch of this core service's current activities are directed by the City's National Pollutant Discharge Elimination System (NPDES) permit for separate municipal storm sewer systems. The City's Urban Runoff Management Plan (URMP) details the programs, initiatives, and activities undertaken pursuant to the stormwater permit. Implementing the URMP is a collaborative effort among several City departments, including: Environmental Services; Public Works; Transportation; Planning, Building and Code Enforcement; General Services; and Parks, Recreation, and Neighborhood Services. These departments all contribute to the City's success in managing stormwater. This core service was previously titled "Manage Urban Runoff Quality."

On October 14, 2009, the San Francisco Regional Water Quality Control Board (Water Board) adopted the Municipal Regional Stormwater NPDES Permit (Stormwater Permit) for the San Francisco Bay Region. The Stormwater Permit became effective December 1, 2009, and remains in effect through November 30, 2014. It replaces the separate countywide municipal stormwater permits with a Stormwater Permit for all 76 Bay Area municipalities in an effort to standardize stormwater requirements throughout the region. The Stormwater Permit aims to protect local creeks and the bay by reducing pollutants in stormwater and eliminating non-stormwater discharges into the municipal storm sewer system. The City eliminates these non-stormwater discharges through its Enforcement Program and by incorporating best management practices for specific municipal operations; requiring stormwater treatment and controls on new and redevelopment projects; participating in regional water quality monitoring; developing and implementing programs targeting key pollutants of concern, such as mercury, polychlorinated biphenyls (PCBs), and trash; and through community engagement and public education efforts.

For the "% of residents surveyed who understand that any substances washed down the street end up in the bay without treatment" performance measure, a June 2009 survey showed a modest

Core Service: Stormwater Management

#### Performance and Resource Overview (Cont'd.)

increase in awareness since the prior survey conducted in 2006-2007. Staff is in the process of developing its five-year implementation plan for the Stormwater Permit, which will include updating the URMP. Performance measures will be developed that align to key Stormwater Permit requirements such as trash load reduction targets.

The "annual cost per residential unit" measure will remain unchanged in 2010-2011, because there will be no rate increase to the Storm Sewer Service Charge for 2010-2011. Sufficient fund balance and reserves are available in the Storm Sewer Operating Fund to provide for the approved needs in this fund.

	Stormwater Management Performance Summary	2008-2009 Actual	2009-2010 Target	2009-2010 Estimated	2010-2011 Target
B	Annual cost per residential unit	\$70.56	\$91.68	\$91.68	\$91.68
R	% of residents surveyed who understand that any substances washed down the street end up in the Bay without treatment through the storm sewer system	44%	50%	N/A*	50%

Changes to Performance Measures from 2009-2010 Adopted Budget: Yes 1

Activity & Workload	2008-2009	2009-2010	2009-2010	2010-2011
Highlights	Actual	Forecast	Estimated	Forecast
Stormwater NPDES permit work plan tasks completed by target date	249	N/A*	N/A*	N/A*

Changes to Activity & Workload Highlights from 2009-2010 Adopted Budget: No

<sup>\*</sup> This data is based on a biennial survey. Data for this measure will next be reported in 2011-2012.

<sup>&</sup>lt;sup>1</sup> Changes to Performance Measures from 2009-2010 Adopted Operating Budget:

**x** "% of Urban Runoff Management Plan Performance Work Plan tasks completed by target date" was deleted because performance progress could not measure the level of work required to comply with the City's Stormwater Permit. The Work Plan measure does not reflect level of effort or relative risk of non-compliance with the regulatory requirements.

<sup>\*</sup> Activity and Workload information will not be compiled during transition to the new Municipal Regional Permit for Stormwater from the San Francisco Regional Water Quality Control Board. The next report is expected in 2011-2012.

Core Service: Stormwater Management

## Performance and Resource Overview (Cont'd.)

Stormwater Management Resource Summary	2	2008-2009 Actual 1	_	009-2010 Adopted 2	010-2011 Forecast 3	_	2010-2011 Adopted 4	% Change (2 to 4)
Core Service Budget *								
Personal Services	\$	2,892,765	\$	4,401,497	\$ 4,842,519	\$	4,960,030	12.7%
Non-Personal/Equipment		2,581,249		4,287,756	4,592,067		6,705,567	56.4%
Total	\$	5,474,014	\$	8,689,253	\$ 9,434,586	\$	11,665,597	34.3%
Authorized Positions		34.93		38.93	38.34		38.34	(1.5%)

<sup>\*</sup> The Resource Summary includes all operating allocations within the Department that contribute to the performance of this Core Service. Note that additional resources from City-Wide, Special Funds and/or Capital Funds may also contribute to Core Service performance, yet are displayed elsewhere in this budget.

## **Budget Changes By Core Service\*\***

Adopted Core Service Changes Positions	All Funds (\$)	General Fund (\$)
Structural Trash Controls	1,000,000	0
2. Hydromodification Management Plan Map Revisions	190,000	0
3. Trash Reduction Program Oversight	117,511	0
4. Household Hazardous Waste Program	100,000	0
5. Integrated Pest Management Projects	100,000	. 0
6. Stormwater Pump Station Monitoring Equipment	50,000	0
7. Corporation Yard Storage Area Protections	36,000	0
8. Rebudget: Creek Trash Prevention Program	600,000	0
9. Rebudget: Environmental Enforcement Data Systems Upgrade	37,500	0
2010-2011 Adopted Core Service Changes Total 0.00	2,231,011	0

<sup>\*\*</sup> Detailed information regarding these budget changes can be found in the City Departments section of this document.

Core Service: Wastewater Management

#### **Core Service Purpose**

anage wastewater for suitable discharge into the South San Francisco Bay and for beneficial reuse to protect the environment and public health.

Key	Operational Services:		
	Source Management and Control Operation of Treatment System and Processes Maintain Equipment and Facilities Regulatory Compliance	_ 	Regulatory Development and Technical Guidance Process Control Monitoring System Improvements

#### **Performance and Resource Overview**

his core service's activities are primarily focused on providing wastewater treatment services to eight jurisdictions and 1.4 million residents in the South Bay, conducting industrial facility inspections and helping to ensure compliance with the City's National Pollution Discharge Elimination System (NPDES) Wastewater permit. This permit is a federally mandated document, as described under the Clean Water Act, establishing maximum pollution limits that the Plant's effluent must meet prior to its discharge to the bay. For the eighth consecutive year, ending December 31, 2009, the San José/Santa Clara Water Pollution Control Plant (Plant) has achieved 100% compliance with its permit discharge requirements. This accomplishment has earned the Plant its fourth Platinum Peak Performance Award given by the National Association of Clean Water Agencies for 100% permit compliance for five or more consecutive years. This core service was previously titled "Manage Wastewater."

Increasingly stringent air quality permit regulations, via the Bay Area Air Quality Management District, resulted in one Notice of Violation received in 2009-2010 and two more that are pending. Additional resources are included as part of this Adopted Budget to address the problematic areas of, and ensure compliance with, the air permit. New performance measures have been added for 2010-2011 to track the number of air emissions and pollutant discharge violations.

For the past several years, the performance issue of greatest concern for this core service has been "Cost per million gallons treated." For 2009-2010, this measure is expected to drop below the 2009-2010 target after rising for several years. The lower than expected cost is due to lower than expected energy expenditures, which are the result of the sharp decline in natural gas prices during 2009-2010 as well as savings generated by recent energy-saving projects implemented at the Plant. Combined, these factors have led to projected energy savings of approximately \$2.5 million for 2009-2010. The lower than average natural gas prices are likely to continue through 2010-2011, therefore the target rate in 2010-2011 for this performance measure is lower than the 2009-2010 target. However, annual increases in categories that include personnel costs, chemicals and supplies are expected to

Core Service: Wastewater Management

#### Performance and Resource Overview (Cont'd.)

partially offset the energy savings. The Plant has continued its aggressive program aimed at reducing energy costs and increasing in-house energy production. Several projects were completed in 2009-2010 including pulsed aeration, pump station optimization, and Dissolved Air Flotation (DAF) system optimization. Several other projects are in progress and are due to be completed during the next two years, including the installation of a high efficiency fuel cell, a solar energy system, and aeration improvements.

The continued decline in influent, due in large part to the economic slowdown, as well as the increasing maintenance costs associated with the aging infrastructure at the Plant are still significant factors impacting the cost of treating wastewater. In response to the maintenance trend of annual costs exceeding expected levels, two programs were established during previous budget cycles. The first was the development of an Asset Management program to implement a comprehensive data-driven strategy to address long-term capital needs as well as daily maintenance within the Plant. The initial phase of this project, a Computerized Maintenance Management System, was implemented in July 2009 and is improving the overall maintenance effort through the change to a more comprehensive work-order system. This initial accomplishment marks the first stage in the development of a comprehensive and automated system that tracks and records all maintenance activities and costs associated with each area of the treatment process. Future phases, planned for the next three years, will include the stocking of expanded inventory to increase productivity by minimizing acquisition times, expanded planning and scheduling so that maintenance resources are better coordinated, and the review and analysis of all the new data collected during the work-order process to allow for the empirical analysis of asset repair and replacement policies.

The second program aimed at controlling annual maintenance costs is the Enhanced Preventive Maintenance Program, currently in the third year of a five year strategy. The program's objective is to develop a systematic approach to ensure all assets are sufficiently maintained to meet or exceed expected life cycles. As part of this effort, dedicated personnel were added in recent years to ensure a more thorough and timely maintenance cycle for all major assets. To date, this team has completed an exhaustive inventory and begun a more aggressive preventative maintenance schedule. As this effort is incorporated with the Asset Management Program, data will become available to better quantify the benefits and give future direction to this program.

The Department is projected to meet or exceed the majority of its performance targets in this core service in 2009-2010. The performance measure "Millions of gallons per day discharged to the Bay during average dry weather season" is below the targeted level due to an overall decline of flows to the Plant and continued recycled water flows to customers. This measure continues to sufficiently meet the Regional Water Quality Control Board's permit requirements and flow trigger of 120 million gallons per day (mgd). This is of critical importance because if average discharges from the Plant were to exceed this level during the May through October dry-weather season, the Regional Board has the authority to order a number of more stringent measures, such as a building moratorium, that could threaten the area's long-term economic growth.

Core Service: Wastewater Management

#### **Performance and Resource Overview (Cont'd.)**

	Wastewater Management Performance Summary	2008-2009 Actual	2009-2010 Target	2009-2010 Estimated	2010-2011 Target
<u>©</u>	Millions of gallons per day discharged to the Bay during average dry weather season State order: 120 mgd or less*	91	95	88	90
<b>©</b>	% of time pollutant discharge requirements are met or surpassed	100%	100%	100%	100%
<b>©</b>	Number of requirement violations -Pollutant discharge -Air emissions	NEW NEW	NEW NEW	NEW NEW	0
	% of scheduled industrial inspections completed on time	99%	95%	95%	95%
8	Cost per million gallons treated	\$996	\$1,020	\$975	\$999
R	% of customers (permitted dischargers) satisfied or very satisfied with service, based on reliability and pre-treatment services	N/A**	90%	N/A**	90%

Changes to Performance Measures from 2009-2010 Adopted Budget: Yes1

Activity & Workload Highlights	2008-2009 Actual	2009-2010 Forecast	2009-2010 Estimated	2010-2011 Forecast
Average millions of gallons per day treated	109	120	108	110
Total population in service area	1,393,538	1,406,000	1,396,803	1,399,000

Changes to Activity & Workload Highlights from 2009-2010 Adopted Budget: Yes1

<sup>\*</sup> Average dry weather season is defined as the lowest three month continuous average between May and October, which during the fiscal year reporting period is July-September.

<sup>\*\*</sup> No survey took place during the specified year. A survey will be conducted in August 2010, with results to be available in 2010-2011.

<sup>&</sup>lt;sup>1</sup> Changes to Performance Measures from 2009-2010 Adopted Budget:

 $<sup>\</sup>mathbf{x}$  "% of suspended solids removed" measure was deleted because the performance measure was too technical for interpretation by the public.

<sup>+ &</sup>quot;Number of requirement violations" measure was added because each violation could result in over \$32,000 in fines per day.

<sup>&</sup>lt;sup>1</sup> Changes to Activity & Workload Highlights from 2009-2010 Adopted Budget:

**x** "Total pounds of suspended solids removed" was deleted because the activity and workload highlight was too technical for interpretation by the public.

Core Service: Wastewater Management

### Performance and Resource Overview (Cont'd.)

Wastewater Management Resource Summary	2008-2009 Actual 1	2009-2010 Adopted 2	2010-2011 Forecast 3	2010-2011 Adopted 4	% Change (2 to 4)
Core Service Budget *					
Personal Services	\$ 33,888,879	\$ 36,178,661	\$ 37,836,757	\$ 38,454,917	6.3%
Non-Personal/Equipment	26,116,386	31,251,942	21,842,718	22,119,294	(29.2%)
Total	\$ 60,005,265	\$ 67,430,603	\$ 59,679,475	\$ 60,574,211	(10.2%)
Authorized Positions	319.61	320.61	316.09	312.09	(2.7%)

<sup>\*</sup> The Resource Summary includes all operating allocations within the Department that contribute to the performance of this Core Service. Note that additional resources from City-Wide, Special Funds and/or Capital Funds may also contribute to Core Service performance, yet are displayed elsewhere in this budget.

### **Budget Changes By Core Service\*\***

Ac	lopted Core Service Changes	Positions	All Funds (\$)	General Fund (\$)
1.	Environmental Services Custodial Services - Service Delivery Model Changes	(4.00)	(128,010)	0
2.	Vehicle Maintenance Staffing and Contractual Servi	ces	(34,188)	0
3.	Water Pollution Control Plant Training Program		649,832	0
4.	Plant Air Regulations Compliance		137,051	0
5.	Plant Master Plan Support		115,129	0
6.	Household Hazardous Waste Program		100,000	0
7.	Plant Capital Staffing		13,422	0
8.	Corporation Yard Storage Area Protections		4,000	0
9.	Rebudget: Environmental Enforcement Data System	37,500	0	
20	10-2011 Adopted Core Service Changes Total	(4.00)	894,736	0

<sup>\*\*</sup> Detailed information regarding these budget changes can be found in the City Departments section of this document.

#### Strategic Support

#### **Strategic Support Purpose**

Strategic Support represents services provided within departments that support and guide the provision of the core services. Strategic Support within the Environmental Services Department includes:

Key	Operational Services:	
	Public Education  Long Range Planning  Employee Services  Facility Management	Financial Management Information Technology Services Clerical Support Materials Management

#### **Performance and Resource Overview**

ey initiatives in this area include management of the Environmental Services Department's special funds and rates, legislative research and advocacy, public education and outreach, and GIS mapping activities.

Strategic Support Resource Summary	2	2008-2009 Actual 1	_	2009-2010 Adopted 2	_	2010-2011 Forecast 3	2010-2011 Adopted 4	% Change (2 to 4)
Core Service Budget *								
Personal Services Non-Personal/Equipment	\$	5,669,359 1,143,776	\$	5,619,437 1,222,064	\$	6,460,476 533,154	\$ 6,211,610 533,154	10.5% (56.4%)
Total	\$	6,813,135	\$	6,841,501	\$	6,993,630	\$ 6,744,764	(1.4%)
Authorized Positions		48.00		48.00		53.00	52.00	8.3%

<sup>\*</sup> The Resource Summary includes all operating allocations within the Department that contribute to the performance of Strategic Support. Note that additional resources from City-Wide, Special Funds and/or Capital Funds may also contribute to Strategic Support performance, yet are displayed elsewhere in this budget.

# Strategic Support

# Strategic Support Budget Changes\*\*

Adopted	Strategic Support Changes	Positions	All Funds (\$)	General Fund (\$)
	nmental Services Department Management ofessional Employees Total Compensation tion		(178,375)	0
2. Enviro	nmental Services Department Administrative g	(1.00)	(70,491)	0
2010-2011	Adopted Strategic Support Changes Total	(1.00)	(248,866)	0

<sup>\*\*</sup> Detailed information regarding these budget changes can be found in the City Departments section of this document.

Core Service: Sanitary Sewer Maintenance

#### **Core Service Purpose**

o provide timely and effective cleaning and repair of the sanitary sewer collection system to ensure uninterrupted sewage flow to the Water Pollution Control Plant.

**Key Operational Service:** 

☐ Maintain Sanitary Sewer System

#### **Performance and Resource Overview**

he Sanitary Sewer Maintenance Core Service's primary goal is to ensure proper sanitary sewage flow by minimizing blockages and other system malfunctions that may have significant health or property damage impacts. The core service includes all maintenance and operational activities necessary to sustain the 2,259-mile collection system. This core service contributes primarily to the Environmental and Utility Services CSA Outcome: Reliable Utility Infrastructure.

Sanitary Sewer Maintenance has consistently performed well over the years, and 2009-2010 was no exception. The percentage of sewer line segments that have been unobstructed remains high, with 98% remaining clear. This was largely accomplished through identifying the high priority areas and performing more extensive preventive maintenance at those locations. Resolution of system obstructions within four hours remained relatively constant at 92%, and a projected 730 miles of sewer lines cleaned, exceeding the targeted amount of 686 miles.

In 2009-2010, eight new specialized combination cleaning trucks (commonly known as Vactors) were added to the fleet, replacing some of the older, outdated sewer cleaning equipment. The Department of Transportation (DOT) now has a fleet of 13 Vactors to perform sewer line cleaning and respond to blockages and other emergencies. The new equipment improves staff's efficiency because only two workers are needed to perform sewer maintenance activities compared to three or more on the older equipment. With 13 Vactors now in the fleet, existing staff are able to increase the mileage of line cleaning from 730 miles to 760 miles.

In 2009-2010, sewer line repair timeliness was somewhat below the target for Priority A (service completely severe) and Priority B (service exists at a limited capacity) repairs. The repair crew had two vacancies which impacted timeliness and resulted in the backlog of repairs increasing from 120 to 170 service requests. Most of these backlogged repairs are in the Priority B category where service still exists, but not at the optimal level. Typically these are lateral or storm system repairs performed during the non-rainy season. The repair crew still strives to ensure that the most critical repairs (Priority A) are addressed within the established timelines and that target remains at 100%.

Core Service: Sanitary Sewer Maintenance

#### Performance and Resource Overview (Cont'd.)

In addition to performing sewer line cleaning and repairs, the sanitary sewer staff performs other activities to sustain a functioning system. System performance and deficiencies are monitored through video and physical inspection. Engineering staff investigate and mitigate chronic blockages and unacceptable odors and take measures such as chemical injection, sealing off the emission holes (forcing foul air to flow through bio-filters for treatment), and using ferrous chloride to reduce odor-causing sulfides. Caustic soda is also used during the hot summer months to prevent odors. Fifteen sanitary pump stations, two soil-bed bio-filters, and one chemical injection station are also managed to ensure the sanitary sewer system operates properly.

The City's major sanitary pump station, the Lamplighter Sanitary Pump Station, was assessed in November 2008 and found to be in good condition. However, given the critical location of this station, the Public Works Department recommended building in a level of redundancy to mitigate the impacts of any unforeseen system failures in the area. To accomplish this, funding is approved in 2010-2011 to perform an assessment of a possible upgrade to the Montague Sanitary Pump Station to relieve some of the load on Lamplighter. After the assessment, funding will need to be identified to implement any recommended improvements. In addition, the Spreckles Sanitary Pump Station was identified as needing improvements, and the Public Works Department is overseeing the design to implement necessary upgrades.

Using Continuous Improvement principles and tools, DOT's High Performance Line Cleaning Team analyzed sanitary line segments by size and problem codes. The data showed that over 96% of the City's blockages, sewage overflows, and backups into homes are the result of problems associated with pipe diameters of eight inches and under. The team modified the preventive maintenance strategy to focus on the lines where 96% of the problems occur. This will allow the City to achieve a complete sanitary sewer cleaning cycle of approximately three years for segments eight inches and under, ten years for segments 10 to 16 inches, and 15 years for segments 18 to 21 inches. This is a significant improvement over the current 13-year average cycle for the whole system, and would result in fewer sewer blockages and overflows, improve the reliability of the sewer system, and better meet environmental and regulatory requirements.

A number of efforts in 2010-2011 are expected to improve the sanitary sewer system program. Funding is approved for new and replacement equipment that includes two Vactor trucks to replace aging equipment in the fleet, three utility trucks with lifting equipment, and one backhoe and trailer. These investments will assist DOT in implementing the preventive maintenance strategy outlined above. The overall program will be studied by a sewer operations and maintenance consultant to identify operations, equipment, staffing, and funding needs and opportunities to make further improvements. Finally, the Public Works Department is managing a pilot condition assessment study in which representative sanitary sewer mains throughout the City will be inspected by closed circuit video. The data will be modeled to better understand the overall condition of the City's sanitary sewer mains.

Core Service: Sanitary Sewer Maintenance

# Performance and Resource Overview (Cont'd.)

-	Sanitary Sewer Maintenance Performance Summary	2008-2008 Actual	2009-2010 Target	2009-2010 Estimated	2010-2011 Target
<b>©</b>	% of sewer line segments without obstruction	99%	98%	98%	98%
[3]	Sanitary Sewer cost to budget ratio	1.00	1.00	1.00	1.00
•	% of obstructions cleared within 4 hours of notification	94%	90%	92%	90%
•	% of in-house repairs completed within established time guidelines: - Priority A: Service completely severe. Temporary service – 24 hours; final repairs – 48 hours	97%	100%	94%	100%
	<ul> <li>Priority B: Service exists at a limited capacity.</li> <li>Final repair – 20 days</li> </ul>	. 72%	70%	63%	70%
	- Priority C: Future service impact identified.  Corrective actions – 90 days	70%	60%	63%	70%
R	% of customers rating services good or better based upon timeliness and effectiveness (rating of 4 or greater on a 1 – 5 scale)	98%	97%	96%	97%

Changes to Performance Measures from 2009-2010 Adopted Budget: Yes1

Changes to Performance Measures from 2009-2010 Adopted Budget: U "% of obstructions cleared within 4 hours of notification" was "% of blockages cleared within 4 hours of notification" to reflect a more consistent and accurate description.

Activity & Workload Highlights	2008-2009 Actual	2009-2010 Forecast	2009-2010 Estimated	2010-2011 Forecast
Miles/number of sewer line segments	2,200/48,000	2,248/48,000	2,259/48,000	2,259/48,000
Miles of sanitary sewer lines cleaned	656	686	730	760
Number of sanitary sewer main line stoppages cleared	700	610	740	700
Miles of sanitary sewer lines inspected by video	57	49	48	50

Changes to Activity & Workload Highlights from 2009-2010 Adopted Budget: No

Core Service: Sanitary Sewer Maintenance

#### **Performance and Resource Overview (Cont'd.)**

Sanitary Sewer Maintenance Resource Summary	2008-2009 Actual 1	2009-2010 Adopted 2	2010-2011 Forecast 3	2010-2011 Adopted 4	% Change (2 to 4)
Core Service Budget *					
Personal Services Non-Personal/Equipment	\$ 8,347,176 4,100,942	\$ 8,486,867 4,717,189	\$ 8,810,780 2,707,512	\$ 8,810,780 3,819,807	3.8% (19.0%)
Total	\$ 12,448,118	\$ 13,204,056	\$ 11,518,292	\$ 12,630,587	(4.3%)
Authorized Positions	89.55	89.15	89.15	89.15	0.0%

<sup>\*</sup> The Resource Summary includes all operating allocations within the Department that contribute to the performance of this Core Service. Note that additional resources from City-Wide, Special Funds and/or Capital Funds may also contribute to Core Service performance, yet are displayed elsewhere in this budget.

## **Budget Changes By Core Service\*\***

Ad	lopted Core Service Changes	Positions	All Funds (\$)	General Fund (\$)
1.	Vehicle Maintenance Staffing and Contractual Services		(45,705)	0
2.	City Facilities Solid Waste Collection Contract Funding Reallocation		(32,000)	0
3.	Sewer Maintenance Vactor Trucks		850,000	0
4.	Utility and Maintenance Trucks		225,000	0
5.	Sewer Lines Repair Equipment		75,000	0
6.	Mabury Yard VoIP Upgrade		40,000	0
20	10-2011 Adopted Core Service Changes Total	0.00	1,112,295	0

<sup>\*\*</sup> Detailed information regarding these budget changes can be found in the City Departments section of this document.

Core Service: Storm Sewer Management

#### **Core Service Purpose**

o maintain and operate the storm sewer system in a way that ensures proper flow and is environmentally sensitive to the regional water tributary system and to the South San Francisco Bay.

Key Operational Services:	
☐ Maintain Storm Sewer System	Provide Street Sanitation
☐ Manage Stormwater Pollution Control	

#### **Performance and Resource Overview**

torm Sewer Management includes preventive cleaning of the storm sewer system, as well as timely responses to storm emergency needs. Inspection, cleaning, and repair of storm sewer inlets, outfalls, pump stations, and retention basins help to prepare the City for each storm season and are necessary to meet non-point source pollution control objectives. This core service contributes primarily to the Environmental and Utility Services CSA Outcomes: Reliable Utility Infrastructure and Healthy Streams, Rivers, Marsh and Bay.

#### **Storm Sewer System**

The Department of Transportation (DOT) is responsible for maintaining the City's 1,250 miles of storm sewer lines and 29,000 storm sewer inlets. All storm inlets city-wide were cleaned of debris between September 2009 and February 2010, and a second round of cleaning was performed in the Alviso community which is more prone to flooding due to its low elevation. Cleaning storm inlets prevents harmful pollutants, metals, and debris from entering the waterways and eventually the bay. The program also greatly reduces the number of storm inlets that become blocked during storm events causing local ponding or flooding. In 2008-2009, 99% of storm sewer inlets were without obstruction, primarily because rainfall was below normal levels. With slightly above average rainfall in 2009-2010, 95% of storm inlets were without obstruction, which is consistent with the targets set for a normal level of rainfall. For 2010-2011, the same performance target of 95% would be maintained assuming normal rainfall levels.

In 2009-2010, 85% of high priority storm sewer service requests were addressed within 4 hours. These requests involved critical issues such as missing storm manholes or inlet grates and flooding along high traffic corridors or around schools and other critical facilities. The higher than expected performance in this area is due to the fact that the performance measure was newly implemented in 2008-2009 and historical data has not been available. Similar response time performance is expected in 2010-2011.

Core Service: Storm Sewer Management

#### Performance and Resource Overview (Cont'd.)

#### Storm Sewer System (Cont'd.)

In addition to cleaning the storm inlets, the City maintains and operates 27 storm water pump stations. 2009-2010 was the sixth year of a multi-year program to address the aging storm sewer infrastructure by replacing or rehabilitating the oldest and least reliable pump stations to reduce the risk of flooding. During the year, construction of Phase I of the Oakmead project was completed. Two more phases are expected to be required to complete the retrofit project at the City's largest pump station. Additional stations identified as requiring rehabilitation work based on both age and performance will be addressed in future years.

In 2010-2011, ongoing efforts to plan for storm emergencies, perform inlet cleaning, address blockages, and meet water quality requirements will continue. The installation of a water level sensor in the Alviso storm collection system is expected to provide early warnings of potential flooding during storms so that staff can respond proactively. New equipment approved in 2009-2010 also improved services. The addition of two new Vactor trucks allowed the City to meet current and anticipated storm water quality requirements more efficiently and new portable discharge pipes allowed for a more timely and efficient setup of the emergency pumps at needed locations.

#### **Stormwater Pollution**

The Department of Transportation works closely with the Environmental Services Department to ensure compliance with the City's Urban Runoff Management Plan and the National Pollutant Discharge Elimination System (NPDES) permit that allows the City to discharge water into South San Francisco Bay. The Water Board completed its negotiation of the Municipal Regional Permit (MRP) with a coalition of 78 cities and public agencies throughout the Bay Area, and released the MRP in December 2009. This permit dictates storm water discharge regulations for all members of the coalition, and may have significant cost implications for how the City operates and maintains the storm system. At this time, cost increases are expected for the following activities: corporation yard retrofits, street sweeping, storm sewer maintenance, trash remediation, and pump station monitoring, maintenance, and operation. The CSA partners are working to ensure that resources are requested and allocated as necessary to meet the new mandates.

#### **Street Sanitation**

The City of San José provides street sweeping services using contractual services and City crews for approximately 4,125 curb miles of residential streets, arterial roadways, bikeways, and in the Central and Neighborhood Business Districts. The Environmental Services Department and the Department of Transportation combine efforts to manage, implement, and inspect the Street Sweeping program.

Core Service: Storm Sewer Management

#### Performance and Resource Overview (Cont'd.)

#### Street Sanitation (Cont'd.)

The last customer service survey regarding street sweeping satisfaction was conducted in 2007, at which time 75% of residents responded that they were satisfied with street sweeping services. Since then, there has been a focus on mitigating factors that prevent effective street sweeping. In 2009-2010, approximately 1,100 tree trimming notices were sent to property owners to trim street trees that were interfering with the sweepers' ability to get close enough to the curb to effectively sweep the streets and gutters. Inspection staff also increased enhanced sweeping efforts in highly impacted parking areas by posting temporary "No Parking" signs on sweep days, and coordinating enforcement and sweeping efforts. On average, these enhanced sweeps have been performed once a week in different impacted areas throughout the City. At the same time, the methodology for assessing the cleanliness of streets has been refined to more accurately reflect the effectiveness of street sweeping efforts. Current inspections of the vendor's sweeping efforts indicate that 84% of streets were clean in 2009-2010. Inspection staff reductions approved in other DOT programs in 2010-2011 will necessitate some redeployment of remaining inspection positions. As a result, it is expected that fewer tree notices will be issued for street clearance and enhanced sweeping efforts will be reduced from four to one time a month. This reduction in inspection capacity and activity is expected to result in a drop in street cleanliness to an estimated 75% along with a minor reduction in tonnage collected.

Core Service: Storm Sewer Management

# Performance and Resource Overview (Cont'd.)

	Storm Sewer Management Performance Summary	2008-2009 Actual	2009-2010 Target	2009-2010 Estimated	2010-2011 Target
<b>©</b>	% of storm sewer inlets without obstruction	99%	95%	95%	95%
<b>©</b>	% of swept curb miles rated good or better based upon effectiveness and satisfaction with street appearance (4 or greater on a 1 – 5 scale	87% e)	82%	84%	75%
8	Storm Sewer Management Cost to Budget Ratio	1.00	1.00	1.00	1.00
•	% of high priority* storm sewer service requests addressed within 4 hours	N/A**	70%	85%	85%
R	% of customers rating street sweeping services good or better based upon effectiveness and satisfaction with street appearance (4 or greater on a 1 – 5 scale)	N/A***	80%	TBD***	TBD***

Changes to Performance Measures from 2009-2010 Adopted Budget: Yes1

Activity & Workload Highlights	2008-2009 Actual	2009-2010 Forecast	2009-2010 Estimated	2010-2011 Forecast
Miles/number of storm sewer segments	1,250/25,500	1,250/25,500	1,250/25,500	1,250/25,500
Number of storm sewer inlets	29,000	29,000	29,000	29,000
Number of storm sewer inlet stoppages identified and cleared	445*	1,500	1,570	1,500
Number of residential curb miles swept	60,690	64,000	62,500	63,000
Number of roadway debris removals	4,129	5,000	4,200	5,000
Thousands of tons of sweeping debris collected	8.1	10.0	8.4	8.0

Changes to Activity & Workload Highlights from 2009-2010 Adopted Budget: No

<sup>\*</sup> High priority storm sewer service requests include missing manhole or inlet grates, and flooding along high traffic corridors, schools, or other critical facilities.

<sup>\*\*</sup> There was a change in methodology for this performance measure starting in 2009-2010.

<sup>\*\*\*</sup> Customer service survey was not conducted in 2008-2009, but was conducted by the Environmental Services Department in April 2010; however, the data is currently being evaluated and is not available.

Changes to Performance Measures from 2009-2010 Adopted Budget: U "% of streets rated clean (4 or greater on a 1-5 scale)" was changed to "% of swept curb miles rated good or better based upon effectiveness and satisfaction with street appearance (4 or greater on a 1-5 scale)" to clarify the conditions and purposes of the measure.

<sup>\*</sup> The number of storm sewer inlet stoppages was down significantly due to a slightly drier than normal year.

Core Service: Storm Sewer Management

## Performance and Resource Overview (Cont'd.)

Storm Sewer Management Resource Summary	2	2008-2009 Actual 1	_	2009-2010 Adopted 2	_	010-2011 Forecast 3	 2010-2011 Adopted 4	% Change (2 to 4)
Core Service Budget *								
Personal Services Non-Personal/Equipment	\$	4,371,202 2,361,821	\$	5,203,086 2,436,106	\$	5,444,975 2,301,574	\$ 5,346,008 2,742,372	2.7% 12.6%
Total	\$	6,733,023	\$	7,639,192	\$	7,746,549	\$ 8,088,380	5.9%
Authorized Positions		47.29		51.64		52.09	50.94	(1.4%)

<sup>\*</sup> The Resource Summary includes all operating allocations within the Department that contribute to the performance of this Core Service. Note that additional resources from City-Wide, Special Funds and/or Capital Funds may also contribute to Core Service performance, yet are displayed elsewhere in this budget.

## **Budget Changes By Core Service\*\***

Ad	opted Core Service Changes	Positions	All Funds (\$)	General Fund (\$)
1.	Pavement Resurfacing and Sealing	(0.95)	(75,331)	0
2.	Vehicle Maintenance Staffing and Contractual Services		(34,202)	0
3.	Infrastructure Maintenance Staffing	(0.20)	(23,636)	0
4.	City Facilities Solid Waste Collection Contract Funding Reallocation		(5,000)	0
5.	Inlet Debris Removal Funding Reallocation		0	(100,000)
6.	Utility and Maintenance Trucks		225,000	0
7.	Our City Forest Grant Match		120,000	0
8.	Sewer Lines Repair Equipment		75,000	0
9.	Mabury Yard VoIP Upgrade		40,000	0

Core Service: Storm Sewer Management

# **Budget Changes By Core Service\*\*** (Cont'd.)

Adopted Core Service Changes	Positions	All Funds (\$)	General Fund (\$)
Rebudget: Non-Personal/Equipment – Gold Street Storm Pump Station Improvements		20,000	0
2010-2011 Adopted Core Service Changes Total	(1.15)	341,831	(100,000)

<sup>\*\*</sup> Detailed information regarding these budget changes can be found in the City Departments section of this document.

#### Strategic Support

#### **Strategic Support Purpose**

rovide the necessary direction and support to the Department of Transportation's core services by ensuring sound budget and fiscal services, hiring of quality new employees, development of a highly skilled and safe workforce, and implementation of useful and reliable information technology systems.

Key	Operational Services:	
	Budget and Financial Services Training and Safety	 Personnel Information Technology

#### **Performance and Resource Overview**

Strategic Support provides essential administrative services that are necessary for the effective management of the Department's core services and support the outcomes in the Environmental and Utility Services CSA. By centralizing operational services such as budget and financial management, training and safety functions, personnel services, and information technology management, front-line staff are better able to provide quality services to the Department's customers. For more information on these services, including the Performance Summary and Activity and Workload Highlights, please see the narrative in the Strategic Support section of the Transportation and Aviation Services CSA section of this document.

Strategic Support Resource Summary	2008-2009 Actual 1		2009-2010 Adopted 2		2010-2011 Forecast 3		2010-2011 Adopted 4		% Change (2 to 4)
Core Service Budget *									
Personal Services Non-Personal/Equipment	\$	766,250 35,880	\$	928,051 40,160	\$	979,997 40,160	\$	940,592 40,160	1.4% 0.0%
Total	\$	802,130	\$	968,211	\$	1,020,157	\$	980,752	1.3%
Authorized Positions		7.59		7.09		7.09		6.92	(2.4%)

<sup>\*</sup> The Resource Summary includes all operating allocations within the Department that contribute to the performance of Strategic Support. Note that additional resources from City-Wide, Special Funds and/or Capital Funds may also contribute to Strategic Support performance, yet are displayed elsewhere in this budget.

# Strategic Support

# Strategic Support Budget Changes\*\*

Ad	lopted Strategic Support Changes	Positions	All Funds (\$)	General Fund (\$)
1.	Transportation Department Management and Professional Employees Total Compensation Reduction		(25,677)	0
2.	Traffic Safety Education Program Staffing	(0.17)	(13,728)	0
20	10-2011 Adopted Strategic Support Changes Total	(0.17)	(39,405)	0

<sup>\*\*</sup> Detailed information regarding these budget changes can be found in the City Departments section of this document.

# 2010-2011

# **OPERATING BUDGET**

Environmental
AND
UTILITY SERVICES
CSA

CITY-WIDE

## Environmental and Utility Services CSA

#### City-Wide Expenses

#### **Overview**

he Environmental and Utility Services Program provides funding for basic utility services in a way that values the environment and makes it easy for residents and businesses to do the same.

### **Budget Summary**

City-Wide Expenses Resource Summary*	2	2008-2009 Actual 1	2009-2010 Adopted 2	-	010-2011 Forecast 3	2010-2011 Adopted 4	% Change (2 to 4)
Environmental and Utility Services	\$	2.357.843	\$ 1.633.653	\$	593,000	\$ 11,588,274	609.3%
Total	\$	2,357,843	\$ 1,633,653	\$	593,000	\$ 11,588,274	609.3%
Authorized Positions		0.00	0.00		0.00	0.00	0.0%

For a complete listing of allocations for the Environmental and Utility Services Program, please refer to the City-Wide Expenses section of this document.

## **Budget Changes By Program\*\***

Adopted Program Changes	Positions	General Fund (\$)
City Building Energy Projects Program		1,500,000
2. Energy Efficiency Program		119,115
3. IDC Garbage Disposal Fees		(299,100)
4. Storm Fees		11,760
5. Miscellaneous Rebudgets		9,663,499
2010-2011 Adopted Program Changes Total	0.00	10,995,274

<sup>\*\*</sup> Detailed information regarding these budget changes can be found in the City-Wide – City-Wide Expenses section of this document.

## Environmental and Utility Services CSA

### General Fund Capital, Transfers, and Reserves

### **Budget Summary**

General Fund Capital, Transfers, and Reserves <i>Environmental &amp;</i> <i>Utility</i> Se <i>rvices CSA</i> Resource Summary*	2	2008-2009 Actual 1	a A	2009-2010 Adopted 2	2010-2011 Forecast 3		_	010-2011 Adopted 4	% Change (2 to 4)
Transfers to Other Funds	\$	2,249,135	\$	0	\$ 0	(	\$	385,923	0.0%
Total	\$	2,249,135	\$	0	\$ 0	;	\$	385,923	0.0%
Authorized Positions		N/A		N/A	N/A			N/A	N/A

<sup>\*</sup> For a complete listing of allocations for the Transfers to Other Funds Program for the Environmental and Utility Services CSA, please refer to the General Fund Capital, Transfers, and Reserves section of this document.

# **Budget Changes By Program\*\***

Adopted Program Changes	Positions	General Fund (\$)
Transfers to Other Funds: Retiree Healthcare		385,923
2010-2011 Adopted Program Changes Total	0.00	385,923

<sup>\*\*</sup> Detailed information regarding these budget changes can be found in the City-Wide – General Fund Capital, Transfers, and Reserves section of this document.